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THE FOURTH PROGRESS REPORT ON THE HOMELESS CHRONICALLY MENTALLY ILL VETERANS PROGRAM

COMMITTEE ON VETERANS' AFFAIRS
U.S. HOUSE OF REPRESENTATIVES

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LETTER OF SUBMITTAL

DEPARTMENT OF VETERANS AFFAIRS,
THE SECRETARY OF VETERANS AFFAIRS,
Washington, DC, September 11, 1991.

Hon. G.V. (SONNY) MONTGOMERY,
Chairman, Committee on Veterans Affairs,
House of Representatives,
Washington, DC.

DEAR MR. CHAIRMAN: I am pleased to provide you with the Department of Veterans Affairs (VA) Fourth Progress Report on the Homeless Chronically Mentally Ill (HCMI) Veterans Program. Like the three annual reports sent to you previously, this report documents and updates information on the full range of program activities offered to homeless veterans suffering from psychiatric and substance abuse disorders. The HCMI Veterans Programs provides these veterans with aggressive outreach services, referral/advocacy services, direct psychiatric and medical assessment and treatment, and time-limited residential care and rehabilitation at non-VA facilities, funded through VA contracts. Since this program began in 1987, over 30,000 veterans have been given assistance and over 8,000 have been placed in non-VA residential treatment facilities.

The purpose of this fourth annual report is to continue to provide you with detailed information on the accomplishments of the HCMI Veterans Program and the challenges staff in the program have encountered in working with this severely disadvantaged group of patients. The report presents monitoring data on resources and clinical activities for the HCMI Veterans Program's third year of operation. It also provides additional data from the clinical process study which was designed to examine the homeless veterans' patterns of program involvement during the year following intake assessment. Initial data from the clinical process study was presented in earlier reports. Finally, this fourth report describes new developments in the evolution of the HCMI Veterans Program, including several collaborative projects with other federal agencies involved in the Interagency Council on the Homeless.

Clinical experience over the last several years has shown that homeless mentally ill veterans are among the most troubled and difficult patients to assist. These veterans have faced innumerable failures, and many have become resigned to a life of despair in shelters and on the streets. The staff in the HCMI Veterans Program work hard to restore hope to these veterans and offer them a chance for a new and better future.

Sincerely,

EDWARD J. DERWINSKI.

THE FOURTH PROGRESS REPORT ON THE HOMELESS CHRONICALLY MENTALLY ILL VETERANS PROGRAM

Department of Veterans Affairs

NORTHEAST PROGRAM EVALUATION CENTER
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WEST HAVEN, CONNECTICUT 06516

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THE FOURTH REPORT ON THE

DEPARTMENT OF VETERANS AFFAIRS

HOMELESS CHRONICALLY MENTALLY ILL VETERANS PROGRAM

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AUGUST 5, 1991

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EXECUTIVE SUMMARY

1. Introduction.

In 1987, the Department of Veterans Affairs (VA) established the Homeless Chronically Mentally Ill (HCMI) Veterans program, a national initiative designed to reach out and provide medical and mental health treatment to homeless veterans suffering from psychiatric and substance abuse disorders. Through this program two-clinician teams at 45 VA medical centers provide a broad range of services including:

* outreach services in shelters, soup kitchens and on the streets, to inform homeless veterans of the availability of various VA services,

* referral/advocacy services, through which clinicians facilitate access of homeless veterans to VA and non-VA health care and rehabilitative services,

* psychiatric and medical assessment and treatment, provided directly by HCMI program staff, and

* time-limited residential treatment at non-VA facilities, funded through VA contracts.

Since its inception, over 30,000 veterans in 26 states and the District of Columbia have been assisted by the program, and over 8,000 were placed in non-VA residential treatment facilities.

This is the fourth in a series of progress reports documenting the accomplishments of the program, the challenges it has encountered working with this severely troubled group of patients, and current plans for its further development.

Previous reports presented detailed assessment data showing that the program successfully reaches its intended target population. At the time of the first contact 75% of those assessed had been homeless for over one month, and 32% for over one year. Clinical evaluation revealed that 42% had major psychiatric symptoms, 49% alcohol problems, 17% drug problems and 53% chronic medical problems. Only 10.5% had worked more than 10 days during the previous month and average income was only $228/month.

This report expands and updates previous reports on the HCMI Veterans program in three ways. It presents:

1) monitoring data on program expenditures and resources, and on clinical activities during the third year of program operation (May 1, 1989 to April 30, 1990);

2) results from a 12-month clinical process study, describing patterns of program involvement during the first year after intake assessment and clinician-observed improvements in clinical status at a sample of sites; and

3) proposed developments for expanding and improving the program, including collaborations with several other federal agencies involved in the Interagency Council on the Homeless.

An Appendix to the report presents findings from several additional studies, addressing: 1) the assessment of program philosophy, 2) special problems of homeless female veterans, 3) factors associated with previous health service utilization, and 4) the impact of the program on VA outpatient service use.

2. The Third Year of Operation: Resources

A total of $12,952,277 was expended by the HCMI Veterans program between May 1, 1989 and April 30, 1990, an increase of 7% ($891,891) over annualized expenditures of prior years. Altogether $3,757,305 (29%) of program funds were spent on personnel salaries; $8,858,771 (68%) on contract residential treatment; and $336,201 (3%) on non-residential treatment all-other costs (e.g. transportation and communication).

A major component of the operation of the HCMI Veterans program is the contracts maintained with 128 non-VA residential treatment facilities. According to a recent survey, these facilities had an average bed capacity of 51 beds each (ranging from a 500 bed multi-service Salvation Army program to a three bed apartment-based program).

The average charge to VA per veteran per day, across all facilities is $39.62 (range $10.00-$96.00). Survey data show that more expensive facilities offer more intensive treatment and are better staffed. The average staff/patient ratio in HCMI contract residential treatment facilities (0.36) is similar to that found in VA's Domiciliary Care for Homeless Veterans program (0.31).

The most frequent types of treatment offered by these facilities are substance abuse counselling (at 46% of facilities), psychological counselling (41%) and assistance with social skills development (36%). On average veterans in residential treatment participate in a total of 22 hours of therapeutic activities each week, nine hours of which are group meetings and 3.5 hours of which are individual counselling.

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3. The Third Year of Operation: Monitoring Clinical Process

To provide ongoing assessment of the program's success in meeting its goals, and to allow comparison of program operation across sites, a uniform monitoring system has been instituted. Data from this monitoring system show that the program assessed 8,623 veterans between May 1989 and April 1990 (FY 89/90), a decline of 13% from previous years. The decline in the number of veterans assessed annually is largely an artifact of the shift to the new monitoring system, but may also reflect a tendency toward providing more intensive services to a smaller number of veterans at some sites.

Veterans assessed during FY 89/90 were slightly younger than those assessed in prior years and 8% more were black, suggesting that the high vulnerability for homelessness among poor veterans in their thirties and among blacks has persisted, and may have increased.

Outreach remains a central part of the program with 54% of those assessed contacted through this route, a slight (3%) decline from previous years. Perhaps as a result of this small decline in the number of veterans contacted through outreach, somewhat fewer veterans were living in shelters at the time of assessment, and slightly fewer had been homeless for over two years. These modest changes in residential status may also be a consequence of the greater percentage of veterans who originally sought help from VA Medical Centers on their own (18% in FY 87/88 vs. 27% in FY 89/90). As the program has become better known among the homeless an increasing number of veterans have sought its help on their own.

Diagnostically, substantial increases are apparent in the percentage with drug and alcohol dependence and with affective disorders. The increase in the frequency of substance abuse disorders may reflect a general increase in the prevalence of substance abuse disorders among homeless veterans.

The 2,420 veterans admitted to residential treatment (28% of those assessed) appear to have been among those in greatest clinical need. They had more severe health problems in comparison to those not admitted, and were less well off financially. They also appear to have the greatest potential for successful rehabilitation since they were less likely to have been homeless for long periods of time, and had better past employment records.

Rates of clinical improvement have not changed significantly from previous years. One third of those admitted to residential treatment successfully completed the program; 32% were living in an apartment, room or house at the time of discharge; 40% were employed; and a majority showed improvement in substance abuse, psychiatric and medical problems. These rates of improvement are

impressive in view of the severity and multiplicity of problems faced by these severely ill and dysfunctional veterans.

4. A Twelve Month Perspective on Clinical Process in the HCMI Veterans Program.

Because of the HCMI Veterans program's innovative design, a special clinical process study was instituted to gather detailed longitudinal data on the clinical services provided by the program over an extended period of time. The central questions addressed by this study concerned patterns of program involvement and the relationship between participation in its various components and clinical outcome.

Of the 1,795 veterans assessed at the nine sites participating in the clinical process study, 22% were seen only once during the year after assessment, 51% were seen 2-9 times and 28% ten or more times. Examining program involvement from a different perspective, 27% of the original cohort were still involved with the program during the second quarter (3-6 months after intake), 14% during the third quarter (6-9 months after intake), and 10% during the fourth quarter (9-12 months). It is impressive that so many HCMI veterans sustained an enduring involvement with the program since: 1) the focus of treatment for the majority of veterans was linkage with other VA and non-VA providers and 2) almost half of those assessed were contacted through outreach and had not sought VA services on their own initiative.

On average veterans had 5-7 clinical contacts with HCMI program staff per quarter, a moderate level of clinical intensity that is consistent with the program's emphasis on making referrals to other providers, providing support and monitoring treatment. Among veterans seen over the entire year, a steady decline in the number of contacts is apparent, from 9.8 contacts during the first quarter to 4.8 during the last quarter. It appears that veterans are seen almost weekly during the early phases of treatment, but that as treatment progresses and immediate crises are resolved, less frequent contacts are necessary.

Notable differences were apparent in the delivery of clinical services among the sites. Sites located in large cities tend to have larger caseloads, do more outreach and place fewer veterans in residential treatment, while sites in smaller cities provide more intensive services and focus their attention on veterans admitted to residential treatment. Programs in large cities, responding to the local resource availability, thus appear to place primary emphasis on the assessment and referral components of the program.

According to the clinicians' assessments, 24-57% of veterans

who were seen during the first three month period after initial clinical assessment in the clinical process study, showed improvement in various clinical problem areas, while 60-70% of those who participated during subsequent intervals of time were judged to have shown such clinical improvement.

Multivariate analysis reveals that admission to residential treatment was, by far, the most powerful predictor of both prolonged involvement in the program and a greater number of contacts with program clinicians. Admission to residential treatment, along with the total number of contacts, was strongly predictive of clinical improvement, and both extended involvement with the program and a greater number of clinical contacts were predictors of optimal housing outcome.

The HCMI Veterans program appears to have a positive clinical impact on a significant percentage of veterans it engages in treatment and participation in residential treatment is more strongly associated than any other factor with clinical benefit. More precise outcome data have been gathered through face to face follow-up interviews with several hundred program participants and will be presented in subsequent reports.

5. New Developments

Although the HCMI Veterans program provides health care services, residential treatment and case management services, homeless mentally ill veterans also face a critical need for: 1) structured work restoration programs and supported employment, 2) long-term housing assistance and 3) facilitated access to public financial support. VA has initiated several new programs to better meet these needs. These new initiatives include:

* the Compensated Work Therapy - Independent Living Housing Program, being implemented at two HCMI program sites,

* the VA Comprehensive Homeless Center concept, being developed at the VAMC in Dallas,

* an new outreach demonstration program being planned in collaboration with the Social Security Administration,

* an outreach and expedited processing initiative being implemented by the Veterans Assistance Service of the Veterans Benefits Administration,

* an ambitious training and education program for professionals working with the homeless, and

* a collaborative program (the VA Supported Housing [VASH] program) to be undertaken in conjunction with the Department of Housing and Urban Development.

6. Conclusion

During the past year, the HCMI Veterans program has continued to provide clinically beneficial services to thousands of homeless veterans across the country. Through close collaboration with both other specialized VA programs for homeless veterans and other agencies in the Interagency Council on the Homeless it is anticipated that several new components of the program will be instituted during the coming year and that these new components may increase both the workload and clinical effectiveness of the program.

ACKNOWLEDGEMENTS

After four years of operation the HCMI program has become a well-established entity within VA's overall health care effort. Many people have contributed to the development of the program and continue to support its operation. Gay Koerber MA and Robert Murphy of the Mental Health and Behavioral Sciences Service have been a beacon of orientation for the program nationally. At NEPEC Dennis Thompson, Alex Ackles, Bernice Zigler, Linda Corwel and Pamela Gott have made the evaluation a success through their meticulous attention to detail. Linda Frisman PhD, who has recently joined us at NEPEC, provided helpful comments and suggestions on this report. Virginia Emond, Vera Ratliff and Karen Arena, who form NEPEC's nerve center continue to play a vital role in integrating the national information network that makes program evaluation possible. To all of them we extend our thanks.

I would especially like to acknowledge the contributions of Peggy Gallup PhD, who is moving on to other things after four years as Project Director of the HCMI Veterans program. Peggy began working on the program almost a month before she formally became a VA employee, and has been one of the bright lights in its continued evolution. We will miss her thoughtful contributions, and wish her the best of luck in the future.

The heart and soul of the HCMI program, of course, is its clinical staff. The HCMI veterans program is: J. Penk CSW, H. Penk MSW, W. Duadaney CSW, Albany, New York; J. Chester MSW, L. Jolly MSW, D. Campbell MSW, Atlanta, Georgia; N. Monk MSW, A. Brown MSW, B. Burge, Augusta, Georgia; J. Santacroce BSW, J. Cornell ACSW, K. Cronin AOS, Bath, New York; R. Roye MSW, C. Klein MSW, S. Olive, Boston, Massachusetts; M. Englert RN MS, A. Shereef MSW, A. Paella MSW, G. Balk, Buffalo, New York; F. Mizzell MSW, A. Payne MSW, R. Orvin, Charleston, South Carolina; L. Melka MSW, E. Herrera RN, K. Wilkinson, Cheyenne, Wyoming; B. D'Souza MD, M. Moore RN MSN, P. Ronan MSW, E. Murphy MEd, Cincinnati, Ohio; D. Goldstein MSW, T. Souza MSW, T. Halfhill MSW, C. Tidrick, Cleveland, Ohio; J. Barilich ACSW, R. West MSW, F. Tolbert RNC, L. Williams, Dallas, Texas; G. Townes MA LISW, L. Lacy MHT, G. Beard MA LSW, R. Newsome, Dayton, Ohio; E. Trujillo MSW, J. Lally MSW, S. Mays BSW, A. Gibson, Denver, Colorado; M. Deese MSW, E. Jackson LPN BSW, Y. Morgan, East Orange, New Jersey; J. San Clemente MD, B. Gray RN MA, J. Bates MEd, A. Yarborough, Hampton, Virgina; A. Pope ACSW LSW, R. Keller MSW, S. Brown MSW, A. Walker, Hines, Illinois; T. Courville MSW, M. Arbuckle RN MSN, W. Canteen MSW, D. Pfeiffer-Traum MSW, Houston, Texas; R. Scott MSW, P. Moore MSW, D. Finch MSW, R. Newton RN MSN, C. Wiggam BSW, Indianapolis, Indiana; J. McGlon MSW, J. Fryer MSW, S. Canterbury, Kansas City Missouri; E. Morris MSW, K. Evatt MNSC, L. Hemphill MSW, A. Barry MSW, Little Rock, Arkansas; W. Frink MSW, D. Shaw MSW, R. Parks MSW, B. Warnick, Long Beach,

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July 22, 1991

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THE FOURTH REPORT ON THE
DEPARTMENT OF VETERANS AFFAIRS
HOMELESS CHRONICALLY MENTALLY ILL VETERANS PROGRAM

CHAPTER 1: INTRODUCTION

In 1987, the Department of Veterans Affairs (VA) established the Homeless Chronically Mentally Ill (HCMI) Veterans program, a national initiative designed to reach out and provide medical and mental health treatment to homeless veterans suffering from psychiatric and substance abuse disorders. Through this program two-clinician teams at 45 VA medical centers provide a broad range of services including:

* outreach services in shelters, soup kitchens and on the streets, to inform homeless veterans of the availability of VA services,

* referral/advocacy services, through which clinicians facilitate access of homeless veterans to VA and non-VA health care and rehabilitative services,

* psychiatric and medical assessment and treatment, provided directly by HCMI program staff, and

* time-limited residential treatment at non-VA facilities, funded through VA contracts.

Since its inception, over 30,000 veterans in 26 states and the District of Columbia have been assisted by the program, and over 8,000 were placed in non-VA residential treatment facilities.

This is the fourth in a series of progress reports documenting the accomplishments of the program, the challenges it has encountered working with this severely disadvantaged group of patients, and plans for further development. Clinical experience over the past three years has shown that homeless mentally ill veterans are among the most troubled and difficult patients to assist. Previous reports from the HCMI Veterans program (Rosenheck, Gallup, Leda et al, 1987, 1988, 1989; Rosenheck, Leda and Gallup 1990) and from the Domiciliary Care for Homeless Veterans Program (DCHV) (Rosenheck, Leda, Medak et al., 1988; Leda, Rosenheck, Medak et al., 1989) have documented in great detail the severity and multiplicity of problems faced by these veterans. Among these problems are serious psychiatric disorders, severe and longstanding chemical addictions, medical illness, social isolation, extreme poverty and vocational disability. The vast majority of those assessed have been homeless for more than one month and almost one third have been homeless for more than a year. Almost every aspect of these veterans' lives has been tainted by failure, demoralization and despair. As a result, many homeless veterans have given up on themselves and have consigned themselves to a life of misery and degradation. It is the ambition of this program to restore hope to these veterans and to offer the promise of a new future.

The context in which we prepared this fourth report on the HCMI Veterans program was somewhat different from that of its predecessors. Last year, 540,000 young men and women from across the nation were called to serve in the Persian Gulf to settle a major world crisis at great personal risk. Having achieved a stunning military victory, active duty personnel and reservists are now heading home to a grateful and proud nation. Some, however, face an uncertain economic future. It seems more important now than ever to show that whatever hardship should befall them in the future, the Department of Veterans Affairs, in recognition of their service and sacrifice, will be there to lend a hand. It is that ideal that the HCMI Veterans program seeks to realize.

A. Evaluation Goals

Because the HCMI Veterans program provides services to an incompletely understood group of veterans and employs an innovative service delivery model, it has been subject to extensive evaluation. This evaluation has been designed to achieve three principal goals.

- To Describe the Status and Needs of Homeless Veterans.

  The condition of the homeless mentally ill emerged, during the 1980s, as a major and unexpected public health problem. Homelessness had virtually disappeared from American cities during the 1960s (Rossi, 1989) and its resurgence two decades later was largely unanticipated. The evaluation of the HCMI Veterans program has provided VA with extensive information about the clinical problems and needs of homeless mentally ill veterans from a broad range of urban and rural settings.

- To Assure Program Accountability.

  The HCMI Veterans program is an innovative clinical program, designed to assist a distinct and underserved group of veterans. There has been particular concern that its continued commitment to its specialized task be monitored and maintained. At a time of budgetary constraint it is especially important that health care programs for the underserved remain focused on their designated tasks. The annual expenditure of funds for residential treatment, provided through contracts with non-VA providers, in particular, has been carefully monitored.

- To Identify Ways of Refining the Clinical Program.

  In its emphases on community outreach, contract residential treatment and continuous case management, the HCMI Veterans program represents an innovative approach to reaching underserved veterans. The operation and effectiveness of this

approach remain, for the most part, undocumented. America's health care system is generally passive in its operation. If patients seek help, they are offered assistance. If they do not, however ill they may be, and however great their need for services, they are left to their own devices. Outreach programs such as the HCMI Veterans program take a more active role towards reaching the underserved. Although they do not impose treatment on patients involuntarily, such programs make treatment more accessible by assertively offering clinical contact in community settings and providing treatment in less structured rehabilitative environments. There is much to be learned about this important approach to health care delivery and the evaluation of the HCMI Veterans program has generated extensive data upon which program refinement and future planning can be based.

B. Three Evaluation Components

The evaluation of the HCMI Veterans program includes three components: an implementation component, a monitoring component and follow-up component. Details of the evaluation methodology and instruments used for each component of the evaluation have been presented in previous reports (Rosenheck, Gallup, Leda et al, 1988, 1989) and will be summarized here.

Implementation Component

The implementation component of the evaluation involved all veterans assessed during the first 10 months of program operation, from May 1, 1987 to March 31, 1988. It was designed to describe: 1) veterans contacted by the program, 2) basic patterns of service delivery; 3) results of residential treatment at the time of discharge; and 4) program costs.[1]

Monitoring Component

The monitoring component, introduced at the conclusion of the implementation evaluation, was designed to provide information about ongoing program operation. The instruments used include a short intake assessment form and documentation of the costs and outcome of each episode of residential treatment. Over 20,000 homeless veterans have been assessed through this monitoring system and over 6,000 episodes of residential treatment have been documented. Monitoring data from May, 1989 through March, 1990 will be covered in this report. Monitoring data on the operation of the HCMI Veterans program between April 1988 and May 1989 were

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[1] Findings from the implementation evaluation have been presented in three previous reports (Rosenheck, Gallup and Leda et al 1988, 1989, 1990) and some of them will be further elaborated in this report.

presented in a previous report (Rosenheck, Gallup, Leda et al 1989).

Follow-Up Component

In order to better understand service delivery patterns and clinical outcomes of the HCMI Veterans program, a one-year longitudinal evaluation was conducted at nine program sites involving 1,795 eligible veterans. This longitudinal evaluation consists of two separate studies.

Clinician process study. The first study was designed to yield a longitudinal view of service delivery and veteran involvement in the program. At nine sites, HCMI clinicians completed quarterly reports on all eligible veterans who had intake assessments over an 10 month period (December 7, 1987 through October 14, 1988) while they remained involved with the program. Data on program involvement during the first three months after intake have been presented previously (Rosenheck, Gallup, Leda et al, 1988, 1989; Rosenheck and Gallup, in press). Additional data, on veteran involvement during the year after intake, will be presented in this report.

Clinical outcome study. To determine the clinical outcome and life circumstances of veterans treated in the HCMI Veterans program, 825 of the 1,795 veterans in the clinical process study (46%) participated in a descriptive, longitudinal outcome study. These veterans received more detailed psycho-social baseline assessments at the time of intake. Efforts were made to re-interview them every three months for the next year. Because of difficulties relocating these veterans only 425 (52%) were re-interviewed after three months and only 196 (23%) were re-interviewed after a full year. Although not fully representative of veterans contacted by the HCMI program, data from this follow-up evaluation will shed light on the results of treatment in the HCMI veterans program and will be presented in a subsequent report.

Through the three evaluation components, therefore, detailed information has been gathered on:

1) the characteristics and clinical needs of veterans treated by the program,

2) the resources used to support the program.

3) the services delivered by the program,and

4) the outcome of program involvement.

C. Summary of Findings from Previous Reports

Program Structure

During the first two years of operation approximately $22 million were spent on the program: $6.5 million for clinician salaries (104 FTEE) and $15.5 million for contract residential treatment and other expenses. Detailed examination of program costs show them to be comparable to those of the other national VA program for homeless veterans, the Domiciliary Care for Homeless Veterans program (Rosenheck, Leda and Gallup, 1990).

Veteran Characteristics

Detailed characterization of the veterans assessed during the first three years of the program are available from the implementation and monitoring evaluation components. With a median age of 40 years, HCMI veterans are younger than veterans in the general population, whose median age is 54 years (Department of Veterans Affairs, 1988). They are predominantly male (99%), with a high proportion of minorities (36% black and 6% hispanic in the HCMI program as compared to 8% and 4% in the general veteran population). Over half served during the Vietnam era (51%) and a total of 29% report past exposure to combat fire.

On initial intake 42% had major psychiatric symptoms, 49% alcohol problems, 17% drug problems and 53% chronic medical problems. The proportion of veterans diagnosed with affective disorder (14%) and schizophrenia (12%) were similar to those reported in community surveys of the homeless (Susser, 1988; Koegel, 1988). Over 23% had attempted suicide in their lives and 5% during the month before their evaluation for the program.

At the time of the first contact, 75% had been homeless for over one month, and 32% for over one year. Only 4% were currently married and only 11% had worked more than 10 days during the previous month. Almost half (48%) had been jailed or imprisoned at least once since the age of 18. Average income during the month before program entry was $228 per month. Veterans most frequently reported loss of income as the reason for their current homelessness, followed by interpersonal conflict.

Assessment of many thousands of homeless veterans in the HCMI Veterans Program reveals them to be similar, on most measures, to other homeless males and to be suffering from multiple, severe, health problems and from devastating social adjustment problems (Rosenheck, Leda and Gallup, 1990).

Services Delivered and Program Involvement

Over half of those assessed by the program (52%) were contacted through community outreach and the vast majority (71%)

expressed interest in the full range of services offered by the program. About one-fourth were subsequently admitted to residential treatment, with an average length of stay of 65 days (average cost = $36 per day or $2,340 per episode).

Data from the follow-up sites showed that 80% of those evaluated received psychiatric assessment or treatment, 48% substance abuse assessment or treatment and 61% medical assessment or treatment. About one-fifth (23%) of those assessed had only one contact with the program, and 36% had more than 5 contacts.

Clinical Outcome

Outcome data presented in previous reports (Rosenheck, Gallup and Leda 1988, 1989; Rosenheck, Leda and Gallup 1990) were based on clinician reports of each veteran's clinical status at the time of discharge from residential treatment. About half of those discharged showed clinical improvement in psychiatric symptoms, substance abuse problems and medical problems. Only 29%, however, successfully completed residential treatment, with 53% either leaving prematurely or being asked to leave for failing to adhere to treatment requirements, and 18% requiring transfer to another institution. At the time of discharge, 31% were living in an apartment, room or house and 40% were employed. Overall, these outcomes represent moderate clinical success with this difficult population, however, the positive impact of residential treatment is suggested by the fact that discharge outcomes were best for those who stayed in residential treatment for more than 90 days and for those who successfully completed residential treatment programs.

D. Overview of this Report

This report will expand and update previous studies of the HCMI Veterans program in three principal ways.

First, monitoring data will be presented on ongoing program expenditures and resources, and on clinical operation from May 1, 1989 to April 30, 1990, the third year of the program's existence.[1] These data will allow comparison of the program's operation during the third year with that of previous years as well as a comparison of program operation among the original 43 sites.

Second, more complete data from the clinical process study will be presented to extend our understanding of patterns of program involvement during the entire first year after initial intake assessment and of clinician-observed changes in clinical

[1] HCMI Veterans programs were initiated at Dallas and Albany during FY 1990 but sufficient data were not available from these sites for them to be considered with the others in this report.

status during that year.

Finally, in the concluding section of this report, we will report on several new developments in the evolution of the program, including collaborations with several other federal agencies involved in the Interagency Council on the Homeless.

Several additional analyses of HCMI program data, not directly related to the formal evaluation of the program, have been completed during the last year, and are included in this report (Appendix B). The first of these studies compares the clinical operation and program philosophy of the HCMI veterans program and another VA community-based mental health program, the Intensive Psychiatric Community Care Program. The second study reviews the distinctive characteristics and clinical problems of homeless female veterans. A third study examines self-reported health service utilization from a subgroup of veterans assessed as part of the implementation study and finally, a fourth study uses national VA computerized outpatient file data to assess the impact of the HCMI Veterans program on VA outpatient service use.

CHAPTER 2
THE THIRD YEAR OF OPERATION: RESOURCES

This chapter will review the financial and personnel resources used to support the HCMI Veterans program during its third year of operation (May 1, 1989 - April 30, 1990 [referred to subsequently as FY 89/90]). For comparison, data are also presented on financial and personnel resources used during the first two years of the program, excluding the initial 6 months (i.e. October 1, 1987 to April 30, 1989, [referred to subsequently as FY 88/89]).[3] Data on expenditures and on staffing are derived, primarily, from monthly reports submitted to VA Central Office (VACO) by each site.[4] In the final section of this chapter data will be presented from a recent survey of residential treatment facilities with which the program has active contracts.

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[3] In this chapter and the next, data from the third year of operation of the HCMI Veterans program are compared with data from previous years. Because the HCMI program began in the month of May, somewhat out of synchrony with the Federal fiscal year which begins on October 1, and because the evaluation has proceeded through several phases of various lengths, there is no simple sequence of years to which we can consistently refer. The following time intervals will be referred to in Chapters 2 and 3.

FY 89/90 is used, in both Chapters, to refer to the third year of the HCMI program's existence (May 1, 1989-April 30, 1990).

FY 88/89 is used in Chapter 2 to refer to annualized fiscal data concerning the period from October 1, 1987 - April 30, 1989, the 18 month period following the start-up six months of the program.

FY 87/89 is used in Chapter 3 to refer to data on the clinical operation of the program from its initiation through the end of its second year of operation (May 1, 1987-April 30, 1989). These data were derived from a merge of common data elements used in both the implementation evaluation and the monitoring component of the evaluation.

FY 87/88 is used in Chapter 3 to identify clinical data collected during the implementation evaluation which lasted 11 months (May 1, 1987-March, 1988).

[4] Special fund control points (FCP) were established to facilitate uniform documentation of these expenditures (FCP 808 for personnel dollars and FCP 809 for all other dollars).

A. Overall Program Expenditures

A total of $12,952,277 was spent on the HCMI Veterans program during FY 89/90, averaging $301,216 per site (Table 2-1).[5] Altogether $3,757,305 (29%) were personnel expenditures, $8,858,771 (68%) funded residential treatment and $336,201 (3%) were for treatment all-other costs (e.g transportation, communication etc.). Total program expenditure in FY 89/90 was 7.4% ($891,891) greater than the annualized FY 88/89 expenditures ($12,060,387).

Personnel Costs

Total personnel expenditure during FY 89/90 was 13% ($444,765) greater than during FY 88/89 (Table 2-1). This increase in total personnel costs reflects a small increase in the number of FTEE allocated to the program, an increase in the average cost per FTEE and an increase in the proportion of filled positions as the program matured.

The largest contributor to increased personnel costs appears to have been the escalation in salary and fringe benefit costs per FTEE. Overall, expenditures per FTEE increased by $3,189 (10%) during the past year, although some portion of this increase may also be due to a reduction in the number of vacant positions.

Our previous report (Rosenheck, Gallup, Leda et al. 1989) noted that a substantial staff turnover in the program appeared to result from the fact that most HCMI professionals had been on temporary or term appointments. During the past year (FY 89/90) plans were made to allocate salary dollars to sponsoring medical centers on a recurring basis, allowing HCMI professionals to receive career VA appointments. This shift occurred at the beginning of FY 1991 and is expected to reduce the rate of staff attrition. The expected increase in staffing stability, however, will require gradual increases in personnel expenditures, due to within-grade increases.

Total personnel expenditures, FTEE and the average cost per FTEE by site are presented in Appendix A[6] (Table A-2-1). Changes in total personnel expenditure are also presented for each site and range from a total decrease of $21,629 to an increase of $47,650. Some of the more dramatic changes in expenditure per FTEE at

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[5] Programs at Dallas and Albany are not included in these totals.

[6] Tables beginning with the letter A present site-by-site data and are found in Appendix A.

TABLE 2-1. ANNUALIZED EXPENDITURES (FY 88/89) AND ANNUAL EXPENDITURES (FY 89/90) AND CHANGES IN EXPENDITURES.

	FY 88/89	FY 89/90*	NET CHANGE	PERCENT CHANGE
TOTAL ANNUAL PROGRAM EXPENDITURE (FCP 808+ FCP 809)				
TOTAL EXPENDITURE	$12,060,387	$12,952,277	$891,890	7.4%
EXPENDITURE/SITE	$280,474	$301,216	$20,742	
PERSONNEL (FCP 808)				
TOTAL FCP 808 EXPENDITURE	$3,312,630	$3,757,305	$444,675	13.4%
EXPENDITURE/SITE	$77,038	$87,379	$10,341	
TOTAL FTEE	104.4	107.6	3.2	3.1%
EXPENDITURE/FTEE/YEAR	$31,730	$34,919	$3,189	10.1%
ALL OTHER COSTS (FCP 809)				
TOTAL FCP 809 EXPENDITURE	$8,747,757	$9,194,972	$447,215	5.1%
EXPENDITURE/SITE	$203,436	$213,837	$10,400	
RESIDENTIAL TREATMENT				
TOTAL EXPENDITURE	$8,286,806	$8,858,771	$571,965	6.9%
EXPENDITURE/SITE	$192,726	$206,018	$13,302	
NON-RESIDENTIAL COSTS				
TOTAL EXPENDITURE	$460,951	$336,201	($124,750)	-27.1%
EXPENDITURE/SITE	$10,720	$7,819	($2,901)	

* Does not include Dallas and Albany programs.

individual sites may reflect changes in the number of vacant positions as well as increased salary costs.

Contract Residential Treatment and Other Costs

The cost of residential treatment in the HCMI Veterans program is monitored in two ways. First, total obligations for residential treatment in FCP 809 are tallied monthly at each medical center and reported to VACO. In addition, at the end of each episode of residential treatment, a clinical summary of that episode of treatment, and its cost, is recorded on the Discharge from Residential Treatment Form (DRTF). Comparison of these two monitoring methods, one linked to the process of fiscal obligation and the other to clinical service, shows a high degree of correspondence, with 96% of all obligated funds reported to VACO also being accounted for on the clinical discharge summaries (for site by site and program-wide summary of these comparisons see Appendix A-2-2)[7].

Overall residential treatment expenditures increased slightly during the past year, by $571,965 (7%), about half the proportional increase of personnel expenditures (13%) (Table 2-1).

Non-residential treatment "all other" costs included $186,144 for transportation (primarily vehicle rental), $12,548 for communication and $137,509 for other expenditures (primarily day treatment). Non-residential treatment "all other" costs were $124,750 (27%) lower than in FY 88/89, reflecting substantially decreased start-up expenditures (Table 2-1).

Data on residential treatment expenditures, total FCP 808 and 809 costs, and total program costs for each site, are presented in Appendix A-2-3, along with changes in the past year.

B. Staff Resources

The original staffing for all sites included two clinicians (primarily social workers and nurses) and 0.2 FTEE clerical support

[7] Expenditures recorded on the DRTF are expected to be slightly lower than those reported to VACO because the DRTF is not completed until the end of each episode of care, while data are submitted to VACO at the end of every month of treatment. The 96% agreement between costs documented by these two monitoring systems is very high and shows notable improvement over the 85% agreement recorded in our last report (Rosenheck, Gallup, Leda et al, 1989).

staff.[8] The program started with a relatively low level of staffing at each site to facilitate rapid program implementation and to allow the establishment of specialized homeless programs at as many VA Medical Centers as possible. These relatively low staffing levels, however, have proved to be something of an impediment to program development and to clinical continuity. As noted in our report on the second year of program operation (Rosenheck, Gallup, Leda et al, 1989), staff turnover frequently has resulted in loss of valuable clinical experience.

To enhance the levels of staffing at HCMI program sites, steps were taken in the past year to increase staffing levels, even in the face of a relatively fixed budget. Eight of the nine positions used for the follow-up evaluation were converted to full-time clinical positions. In addition, all sites were invited to develop proposals for converting funds targeted for residential treatment to salary dollars with which to support staff expansions. Ten of these proposals were approved by VACO. These expansions were only partially implemented during FY 89/90. In addition, due to the magnitude of its homeless veteran population, the New York City HCMI program site was given additional FTEE with which to establish a drop-in center. As a result of these changes the total FTEE involved in the program increased 3%, from 104.4 to 107.6.

C. Survey of Residential Treatment Facilities

One of the principal resources of the HCMI Veterans program is the roster of residential treatment facilities with which it has established contracts. A survey of these facilities, their staffing levels and costs, and the services they provide was conducted 7 months after the HCMI Veterans program began, in December, 1987 (Leda and Rosenheck, 1987), and was refined and updated this past year.

Types of Facilities

Altogether, during the third year of program operation, active contracts were maintained with 128 non-VA residential treatment facilities. On average each site maintained contracts with three facilities (range 1-11). These facilities can be grouped into 6 categories listed in Table 2-2. Just over half (53%) are transitional residences (halfway houses or time-limited residential rehabilitation programs); 12% are longer term health maintenance facilities and 5% more intensive crisis centers. Facilities providing less intensive treatment include supervised apartment programs (13%) and what we have termed shelters with health care services (13%).

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[8] The Washington, DC site was staffed with four FTEE from the beginning of the program.

TABLE 2.2. RESIDENTIAL TREATMENT FACILITY TYPES: NUMBER OF CONTRACTS, OCCUPANCY, COST AND STAFFING.

Type of Facility	Number of Contracts	Percent of Total	Avg. No. of Beds/ Facility	Avg. No. of Vets/ Facility	Percent of Beds Occ. by Vets	Mean Per Diem Rate	Mean Staff/Pt. Ratio
Transitional Residence	68	53.1%	38.0	4.8	12.4%	$40.96	0.34
Crisis center	6	4.7%	34.2	1.0	2.9%	$62.17	1.00
Long-term Health Maintenance	15	11.7%	91.3	5.8	6.4%	$35.33	0.23
Supervised Apartment	16	12.5%	46.4	6.8	14.5%	$39.19	0.22
Shelter with Services	17	13.3%	80.9	2.2	2.8%	$30.23	0.16
Other	6	4.7%	40.8	18.0	44.1%	$39.50	0.24
Total	128	100.0%	51.3	5.3	10.2%	$39.62	0.36

On average each facility had a total bed capacity of 51.3 beds. The largest facility was a 500 bed multi-service Salvation Army program. The smallest was a three bed apartment-based program. At the time of the survey an average of 5.3 HCMI veterans were in treatment at each facility, occupying 10% of their total bed capacity.

Sponsoring organizations are a mix of new and old. Nearly three-quarters are run by non-profit corporations, many of which have long experience treating the destitute and homeless (e.g. the Salvation Army, Goodwill Industries and Volunteers of America). Five facilities, however, were developed specifically to provide treatment to veterans in the HCMI Veterans program.

Per Diem Cost and Staffing

The average daily charge across all facilities is $39.62 (range $10.00-$96.00)(Table 2-2). Facilities that offer more intensive treatment and that are better staffed are the most expensive. Psychiatric crisis centers are the most expensive type of facility ($62.17/day), followed by transitional residences ($40.96/day) and supervised apartments ($39.19/day) (Table 2-2). Long-term care facilities were in the mid-range of costs ($35.33/day) while shelters with health care services were the least expensive ($30.23/day). While all facilities provide 24 hour supervision and health care services the actual staff/patient ratio varies and is highly correlated with cost. Psychiatric crisis centers have a 1.0 staff/patient ratio (and cost $62.17 per day) as compared to 0.16 staff members/patient at shelters with services (which cost $30.23 per day). The average staff/patient ratio (0.36) found in the HCMI contract residential treatment facilities is similar to that found in VA's Domiciliary Care for Homeless Veterans program (average = 0.31; range = 0.10 - 0.44)(Rosenheck, Leda and Gallup, 1991).

Treatment Provided

Services most frequently offered by these facilities were substance abuse counselling (at 46% of facilities), psychological counselling (41%) and assistance with social skills development (36%). On average, veterans in residential treatment are provided 22 hours of therapeutic activities each week. Group meetings and activities are scheduled for 9 hours per week on average, with individual counselling for an additional 3.5 hours.

D. Summary

During its first three years of operation, the HCMI Veterans program has established and maintained a stable resource base of VA professionals and contract residential treatment facilities. Careful management evaluation of the program has resulted in adjustment of staffing patterns and expenditures to optimally

support its success in its mission. Through the HCMI Veterans program, VA has made a substantial and sustained commitment to providing specialized assistance to homeless mentally ill veterans across the country.

CHAPTER 3
THE THIRD YEAR OF CLINICAL OPERATION

The HCMI Veterans program was established to achieve the following goals:

1. to reach out to underserved homeless chronically mentally ill veterans in the community,

2. to facilitate their access to VA and non-VA health care services,

3. to provide residential treatment on a time-limited basis, and

4. through the above services, to improve the health, vocational performance, and access to basic social and material resources (including housing and social support) of homeless veterans across the country.

To provide ongoing assessment of the program's success in meeting these goals, and to compare program operation at all sites, a uniform monitoring system was instituted at the conclusion of the implementation evaluation.[9] Using this monitoring system veterans at all sites are assessed with a common instrument, the Homeless Veterans Data Sheet (HVDS). Those admitted to residential treatment are entered on a log and their status at the time of discharge (along with length of stay and cost data) are recorded on the Discharge from Residential Treatment Form (DRTF).

Data gathered through this monitoring system allow both program-wide and site-by-site review of the following information:

1. descriptive data on veterans assessed by the program during FY 89/90;

2. an account of their entry into the program through outreach and other routes;

3. a summary of residential treatment services provided, including duration and cost; and

4. information on the health status and social adjustment of program participants at the time of discharge from residential treatment.

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[9] For those sites involved in the follow-up study, the monitoring system was instituted in July, 1989.

A. Overall Program Performance

Intake Data on Veterans Involved in the HCMI Veterans Program.

A total of 8,623 veterans were assessed between May 1989 and April 1990 (FY 89/90), a modest decline from a yearly average of 9,875 evaluations, during the first two years of the program. This decline in new evaluations reflects both an increasing emphasis on case management and a change in data collection procedures (the HVDS is now completed only on veterans who are expected to become active participants in the program, not on all veterans who are contacted).

Table 3-1 presents summary data from all sites for the third year of the program (FY 89/90) and comparative data from FY 87/88. Veterans assessed during FY 89/90 were slightly younger than those assessed in FY 87/88 and 8% more were black, suggesting that the high vulnerability for homelessness among those in their thirties and among blacks (Rossi, 1989) has persisted, and perhaps even increased, during the past three years.

Outreach remains a central part of the program with 54% of those assessed contacted through this route, a slight (3%) decline from previous years. Perhaps as a result of this small decline in the number of veterans contacted through outreach, somewhat fewer veterans were living in shelters at the time of assessment, and slightly fewer had been homeless for over two years. These modest changes in residential status may also be a consequence of the increasing tendency, as the program has become better known in the community, for veterans to seek help from VA Medical Centers on their own (18% in FY 87/88 vs. 27% in FY 89/90).

Diagnostically, substantial increases are apparent, among those assessed, in the percentage with drug and alcohol dependence and with affective disorders. The increase in the frequency of substance abuse disorders may reflect a general increase in the prevalence of substance abuse disorders among homeless veterans.

Veterans Admitted to Residential Treatment

Of those assessed by the program in FY 89/90, 2,420 (28%) were admitted to residential treatment. Those admitted to residential treatment differed from those not admitted on several characteristics (Table 3-2). Most notably, veterans admitted to residential treatment, in comparison with those not admitted:

1) were more likely to be residing in an institution at the time of intake;

2) had been homeless for shorter periods of time;

Table 3-1. Characteristics of Intakes Completed in FY 87/88 (N=10,529, see note, below) and in FY 89/90 (N=8,623)

	FY 87/88 (1st YR.)	FY 89/90 (3rd YR.)	Change
DEMOGRAPHICS			
AGE (mean)	42.6	41.9	-0.7
RACE +			
White	58.3%	53.4%	-4.9% ***
Black	33.6%	41.5%	7.9% ***
Hispanic	6.7%	4.0%	-2.7% ***
Other	1.4%	1.1%	-0.3%
GENDER +			
Male	98.6%	98.1%	-0.5% *
Female	1.4%	1.9%	0.5%
MARITAL STATUS *			
Married	3.6%	4.3%	0.7%
Were Married	62.8%	62.8%	0.0%
Never Married	33.6%	32.9%	-0.7%
RESIDENTIAL STATUS			
CURRENT RESIDENCE +			
Own Apartment	7.7%	4.4%	-3.3% ***
Intermittent with Fam/Friends	9.2%	11.2%	2.0% *
Shelter	47.6%	39.7%	-7.9% ***
No Residence/Inst.	35.5%	44.7%	9.2% ***
HOMELESSNESS +			
<1 month	24.9%	25.3%	0.4%
1-5 months	29.0%	34.7%	5.7% ***
6-11 months	14.1%	13.3%	-0.8%
12-23 months	10.8%	9.7%	-1.1% **
24 months or more	21.2%	17.0%	-4.2% ***
PUBLIC SUPPORT/EMPLOYMENT			
PUBLIC SUPPORT +			
Service C'ted: Psy	4.6%	5.5%	0.9% *
Service C'ted: Med	8.6%	9.3%	0.7%
NSC Pension	6.0%	4.8%	-1.2% ***
Non-VA Disability	10.7%	11.0%	0.3%
Other Public Supt.	21.0%	20.2%	-0.8%
USUAL EMPLOYMENT: PAST 3 YRS +			
Full Time	30.5%	31.7%	1.2%
Part-Time Reg.	33.8%	26.7%	-7.1% ***
Student	1.2%	0.5%	-0.7% ***
Retired/Disabled	8.4%	14.9%	6.5% ***
Unemployed	24.4%	25.8%	1.4%
PROGRAM ENTRY/CLINICAL STATUS			
HOW PROGRAM CONTACT INITIATED +			
Outreach	56.8%	54.2%	-2.6% ***
Non-VA Homeless Pgm	12.2%	11.2%	-1.0%
Came to VA	18.2%	26.5%	8.3% ***
Came to Vet Center	6.3%	2.8%	-3.6% ***
Other	6.5%	5.2%	-1.3% ***
WHERE INTERVIEWED +			
Shelter	31.4%	31.2%	-0.2%
Street	4.1%	4.0%	-0.1%
Soup Kitchen	11.5%	6.6%	-4.9% ***
VAMC	30.5%	38.2%	7.7% ***
Vet Center	4.7%	3.8%	-0.9% **
Other	17.8%	16.3%	-1.5% **
CLINICAL PSYCHIATRIC DIAGNOSES @			
Alcohol Dependence	55.2%	64.2%	9.0% ***
Drug Dependence	18.4%	34.9%	16.5% ***
Personality Dx.	18.3%	19.9%	1.6% **
Schizophrenia	12.3%	12.3%	0.0%
PTSD from Combat	9.3%	10.0%	0.7%
Affective Disorder	9.3%	23.1%	13.8% ***
PAST HOSPITALIZATION +			
Psychiatric	33.1%	32.3%	-0.8%
Alcohol Abuse	44.2%	50.7%	6.5% ***
Drug Abuse	15.4%	26.9%	11.5% ***

Significance of difference between 1987/88 and 1989/90:
* p <.05
** p <.01
*** p <.001

Note: Sample sizes vary because of different rates of completion of various forms: N=10,529 (+), 3,701 (*), 4,984 (@).

TABLE 3-2. CHARACTERISTICS OF VETERANS ADMITTED TO RESIDENTIAL TREATMENT COMPARED TO VETERANS NOT ADMITTED TO RESIDENTIAL TREATMENT, FY 89/90.

	NOT ADMITTED TO RES. RX. N=6,203	ADMITTED TO RES. RX. N=2,420	
SEX			
Male	98.2%	97.8%	
Female	1.8%	2.2%	
RACE			
White	52.4%	56.1%	**
Black	42.5%	39.0%	**
Hispanic	3.9%	3.9%	
Other	1.1%	1.1%	
MARITAL STATUS			
Married	5.0%	2.4%	***
Was Married	60.9%	67.8%	***
Never Married	34.1%	29.8%	***
PERIOD OF SERVICE			
Pre WWII	0.3%	0.0%	
WWII	5.9%	3.1%	***
Pre Korea	0.9%	1.0%	
Korea	8.4%	7.2%	*
Pre Vietnam	8.5%	7.7%	
Vietnam	51.0%	56.8%	***
Post Vietnam	25.1%	24.3%	
FIRED UPON	28.7%	27.3%	
PRISONER OF WAR	1.4%	1.0%	
CURRENT RESIDENCE			
Own Apt	5.3%	2.1%	***
Family or Friends	11.5%	10.4%	
Shelter	40.1%	38.7%	
No Residence	38.3%	36.8%	
Institution	4.8%	12.1%	***
DURATION OF HOMELESSNESS			
<1 month	25.4%	23.6%	
1-5 months	31.7%	40.6%	***
6-11 months	13.0%	13.7%	
12-23 months	9.6%	9.6%	
24 months	18.7%	11.8%	***
Unknown	1.7%	0.7%	***

* p <.05; ** p<.01; *** p<.001

TABLE 3-2 (CONT'D). CHARACTERISTICS OF VETERANS ADMITTED TO RESIDENTIAL TREATMENT COMPARED TO VETERANS NOT ADMITTED TO RESIDENTIAL TREATMENT.

	NOT ADMITTED TO RES. RX. N=6,203	ADMITTED TO RES. RX. N=2,420	
Public Support			
S/C Psych	7.6%	6.2%	
S/C Other	12.9%	9.0%	***
NSC Pension	6.6%	2.9%	***
Non-VA Disability	12.0%	8.5%	***
Other Public Suppt.	22.1%	15.3%	***
HEALTH STATUS			
Serious Medical Prob.	47.3%	38.8%	***
Alcohol Dep.	47.7%	49.2%	
Past Alc. Hosp.	47.9%	57.4%	***
Drug Dep.	24.3%	29.8%	***
Past Drug Hosp.	24.6%	33.0%	***
Psych. Prob.	41.5%	47.2%	***
Past Psych Hosp.	30.8%	37.0%	***
USED VA HEALTH CARE (6 MOS)	47.4%	61.4%	***
USUAL EMPLOYMENT PAST 3 YRS			
Full Time	29.1%	41.7%	***
Part-Time	25.5%	29.8%	***
Retired/Disabled	16.7%	10.2%	***
Unemployed	28.7%	18.2%	***
INCOME IN PAST 30 DAYS			
None	30.6%	37.7%	***
$1-$49	9.3%	11.1%	*
$50-$99	10.7%	11.0%	
$100-$499	34.0%	31.6%	*
$500-$999	13.2%	7.1%	***
>$1000	2.3%	1.6%	*
Clinical Diagnosis			
Alcohol Dep.	62.7%	68.2%	***
Drug Dep.	33.0%	39.9%	***
Schizophrenia	12.6%	11.4%	
Other Psychosis	7.2%	5.1%	***
Affective Dx.	23.0%	23.3%	
Personality Dx.	19.5%	20.9%	
PTSD from Combat	9.3%	11.8%	**
Adjustment Reaction	22.7%	27.3%	***
Other Psychiatric Dx.	12.9%	11.1%	*

* p <.05; ** p<.01; *** p<.001

TABLE 3-2 (CONT'D). CHARACTERISTICS OF VETERANS ADMITTED TO RESIDENTIAL TREATMENT COMPARED TO VETERANS NOT ADMITTED TO RESIDENTIAL TREATMENT.

	NOT ADMITTED TO RES. RX. N=6,203	ADMITTED TO RES. RX. N=2,420	
WHERE INTERVIEWED			
Shelter	33.6%	24.9%	***
Street	4.7%	2.3%	***
Soup Kitchen	8.1%	2.6%	***
VAMC	32.1%	54.1%	***
Vet Center	4.2%	2.8%	***
Other	17.4%	13.4%	***
HOW PROGRAM CONTACT INITIATED			
Outreach	57.5%	45.6%	***
Non-VA Homeless Program	9.7%	15.1%	***
Came to VA	24.3%	32.2%	***
Vet Center	2.8%	2.7%	
Other	5.5%	4.4%	*
VET RESPONSE TO CONTACT			
Wouldn't Talk	0.5%	0.5%	
Not Interested	3.4%	0.5%	***
Basic Services Only	19.6%	4.1%	***
Wants All Services	68.3%	92.9%	***
Other	8.4%	2.0%	***

KEY:
* $p < .05$
** $p < .01$
*** $p < .001$

3) were less frequently receiving VA or non-VA public support payments;

4) had better employment histories during the previous three years;

5) were more frequently found to be suffering from psychiatric and/or substance abuse problems;

6) had lower incomes;

7) were less likely to have been interviewed, initially, in the community or contacted through outreach; and

8) more frequently expressed interest in receiving the full range of services available through this program.

It thus appears that veterans admitted to residential treatment were, in most respects, those in greatest need, i.e. they had more severe health problems in comparison to those not admitted and were less well off financially. At the same time they appear to also have been those with greater potential for successful rehabilitation since they were less likely to have been homeless for long periods of time, and had better employment records.

It is notable that among those not admitted to residential treatment, 68% expressed interest in the full range of VA services (including residential treatment) and, on most measures, they also showed frequent clinical problems. Although direct information on this issue is not available, it appears that many more veterans could have benefitted from residential treatment had additional resources been available.

More specific data on appropriateness for admission are presented in the upper section of Table 3-3. Program guidelines indicate that veterans admitted to residential treatment should be: 1) unable to afford housing; 2) homeless; and 3) diagnosed with a chronic psychiatric illness. Altogether 2% of those admitted had incomes over $1,000 during the month prior to admission, 2% were living in an apartment room or house and 4% did not have a psychiatric diagnosis on the intake form. A total of 7% of those admitted to residential treatment had at least one of these indicators. These numbers are quite similar to those reported during the first year the monitoring system was in effect (Table 3-3) and do not necessarily indicate that inappropriate admissions. For example, although 4% of those admitted were not given a psychiatric diagnosis at intake, fewer than 1% had no mental health or substance abuse problems identified at the time of discharge from residential treatment. Although some veterans earned over $1,000 during the month prior to intake assessment, they may have not had adequate funds for a monthly rental. Others, who were living in an apartment room or house at the time of intake, were

TABLE 3-3. Residential Treatment in FY 87/89 and in FY 89/90.

	FY 87/89	FY 89/90	CHANGE
APPROPRIATENESS OF ADMISSIONS *			
Income > $1,000	2.0%	1.8%	-0.2%
Living in Apt/Rm/House	3.5%	2.1%	-1.4%
No Psych or S.A. Diagnosis (at intake)	2.0%	3.5%	1.5%
Any of Above	7.0%	7.1%	0.1%
DISCHARGE DATA			
Number of Discharges/Yr	2,672	3,487	816
Average Length of Stay (days)	65	75	10
Average Cost Per Day	$35.51	$38.64	$3.13
Average Cost per Episode	$2,301	$2,959	$658
Status at Discharge			
Successful Completion	29.0%	33.3%	4.3%
Dropped Out/ Required to Leave	53.6%	48.5%	-5.1%
Transferred/Other	17.5%	18.2%	0.8%
Living Situation at Discharge			
Apartment, Room or House	31.5%	32.2%	0.7%
Institution	29.1%	28.4%	-0.6%
Undomiciled/Unknown	39.5%	38.9%	-0.6%
Employment Status			
Employed	40.0%	39.6%	-0.4%
Disabled/retired	20.9%	16.7%	-4.2%
Unemployed/Other	39.2%	43.7%	4.5%
Clinical Status (Improvement)			
Alcohol Abuse	55.8%	57.2%	1.4%
Drug Abuse	54.3%	50.5%	-3.8%
Psychiatric Symtpoms	55.0%	55.6%	0.6%
Medical Problems	66.3%	65.8%	-0.4%

* FY 87/89 appropriateness data are based on partial sample of 2,286 discharges from residential treatment between March 1988 and May 1989.

about to be evicted. The vast majority of those admitted were fully within program guidelines and no erosion of the degree of adherence to those guidelines is apparent from these data.

Status at the Time of Discharge from Residential Treatment

A total of 3,487 homeless veterans were discharged from residential treatment during FY 89/90. Their average length of stay was 75 days at an average cost of $39 per day and $2,959 per treatment episode. In contrast, the 5,343 episodes of care completed during the previous two years had an average length of stay of only 65 days, an average cost of $36 per day and $2,301 per episode (Table 3-3). Increases in length of stay reflect the maturation of the program, and are also the principal reason for increased costs per episode of care. Daily rates have increased only modestly (6% over three years) and may be explained by inflation.

Of those discharged from residential treatment 33% successfully completed treatment, 32% were living in an apartment room or house and 40% were employed either full-time or part-time. These proportions are generally similar to those reported in prior years, as were rates of clinical improvement in alcohol, drug, psychiatric and medical problems (Table 3-3), which stayed around 50%.

Table 3-4 shows average length of stay and per episode cost data for veterans in various outcome categories. As in previous years, veterans with the best outcomes had the longest lengths of stay and the greatest overall treatment costs.

B. Monitoring the Performance of Individual Sites

Premises on Which the Monitoring System is Based

Community based care of the homeless mentally ill is a new clinical activity, requiring considerable freedom for clinical innovation. Monitoring efforts are based on the assumption that rigid regulations or performance standards are not appropriate for this program in its current, relatively early, stage of development, and that premature standardization might stifle the creative evolution of this new type of clinical work. At the same time, it is important to monitor the program as completely and objectively as possible. Through the monitoring system we have sought to assemble a body of data that will reflect, for the consideration of VACO program developers and clinicians, the operation of the program as it evolves over the coming years.

Overview of Site-Specific Monitoring Data.

The monitoring data available on individual sites are the same as those presented above for the entire program, and cover a

TABLE 3-4. LENGTH OF STAY AND COST PER EPISODE, BY DISCHARGE STATUS.

	Percent of D/Cs	ALOS (days)	Cost/Episode
Status at Discharge			
Successful Completion	34.2%	102.7	$3,834
Rules violation	19.3%	49.4	$1,833
Dropped Out	27.5%	36.7	$1,329
Became Ill	10.2%	46.3	$1,654
Other	8.9%	64.0	$2,311
Living Situation at Discharge			
Apartment, Room, SRO	33.4%	93.5	$3,534
No Residence	7.0%	40.4	$1,540
Halfway house/ trans. res.	12.4%	76.5	$2,731
Institution	16.4%	52.6	$1,949
No indication	30.2%	41.0	$1,446
Other	0.5%	76.2	$2,800
With Whom Living at Discharge			
No Residence	7.1%	42.3	$1,604
Alone	18.1%	101.1	$3,723
Spouse and/or children	2.0%	69.1	$2,560
Other family	5.9%	73.2	$2,717
Friends	13.4%	92.4	$3,433
Strangers	23.3%	57.5	$2,186
No indication	30.3%	40.7	$1,437
Employment at Discharge			
Full-time	28.1%	86.0	$3,136
Part-time or temporary	11.2%	78.6	$2,808
Voc. training/volunteer	3.5%	90.1	$3,502
Disabled/retired	17.1%	63.2	$2,463
Unemployed	36.5%	45.9	$1,688
Other	3.5%	37.0	$1,238
Clinical Status at Discharge (of those with problem)			
Alcohol			
Improved	58.84%	81.4	$2,983
Unchanged/deteriorated	41.2%	37.2	$1,372
Drug			
Improved	57.9%	77.7	$2,887
Unchanged/deteriorated	42.1%	41.0	$1,467
Mental Health			
Improved	57.2%	88.3	$3,421
Unchanged/deteriorated	42.8%	41.9	$1,492
Medical			
Improved	67.0%	74.6	$2,776
Unchanged/deteriorated	33.0%	47.7	$1,715

total of 104 measures of program performance derived from both intake assessment data and discharge summaries from residential treatment. These 104 variables can be clustered into the following categories and are reported in detail for each site on the tables located in the Appendix (A-3-1 to A-3-12):

I. Intake Data

1. The number of veterans assessed annually per site (Table A-3-1),
2. the age and race of those assessed (Table A-3-1 and A-3-2),
3. residence at the time of intake and the duration of the current episode of homelessness (Tables A-3-3 and A-3-4),
4. mode of first contact with the program (Table A-3-5),
5. psychiatric and substance abuse problems as assessed at intake (Table A-3-6),
6. previous hospitalization for mental health problems (Table A-3-7),

II. Residential Treatment

7. appropriateness for admission to residential treatment (Table A-3-8 and A-3-9),
8. the number of residential treatment episodes concluded during the year, their duration and cost (Table A-3-10),
9. the number of episodes of residential treatment of extended duration (Table A-3-11), and
10. clinical status at the time of discharge from residential treatment (Table A-3-12).

Wherever possible comparative data from previous years are included so that changes in program operation at each site are identified. Because instruments have changed since the program began, data from prior years are not always comparable to those from FY 89/90. In these cases only the most recent data are presented.

Critical Monitors: Statistical Norms vs. Practice Standards

Although absolute practice standards have not been established for this program, monitoring data allow more than a description of the performance of individual sites and statistical norms have been computed for selected critical monitors.

The distinction between statistical norms and formal practice standards is an important one. Practice standards are established by a consensus of professionals and represent directive guidelines for appropriate clinical practice. They codify how health care should be conducted. Statistical norms, in contrast, reflect how health care is practiced on average, without specifying exactly what is and what is not acceptable practice. Although practice standards have not been established for the HCMI Veterans program, practice variation within the program can be measured and statistical outliers can be identified. The identification of statistical outliers must not be confused with the identification of practice standard violations. Statistical outliers are extremes on a continuum and, as such, deserve attention. However, without further exploration of specific circumstances no conclusions can be drawn regarding their exact meaning.

The critical monitors. Twenty-one of the 104 monitoring measures were selected as critical monitors because they assess aspects of the program that are of special importance to its mission. All of the critical monitors are listed (in abbreviated form) across the top of Table A-3-13 and include:

1. the number of intake assessments (HVDS) completed in FY 89/90 by each site,

2. the percent change in the number of annual intake assessments completed from the first two years of program operation (FY 87-89) to the most recent year (FY 89/90),

3. the percentage of veterans living in an apartment, room, or house at the time of intake assessment,

4. the percentage of veterans living with family or friends at the time of intake assessment,

5. the percentage of veterans living in an institution at the time of intake assessment,

6. the percentage of veterans at each site with an income of over $1,000 during the month prior to assessment,

7. the percentage of veterans homeless for less than 1 month at the time of assessment,

8. the change in the percentage of veterans homeless for less than 1 month at the time of assessment between FY 87/89 and FY 89/90,

9. the percentage of veterans who came to the VA on their own at each site,

10. the change in the percentage of veterans who came to the VA on their own at each site from FY 87/89 to FY 89/90,

11. the percentage of veterans with a psychiatric or substance abuse diagnosis identified at the time of intake,

12. the percentage of veterans with an indicator of possible inappropriateness for admission to residential treatment,

13. the percentage of veterans with a psychiatric or substance abuse diagnosis at the time of discharge from residential treatment,

14. the average length of stay per episode of residential treatment,

15. the total cost per episode of residential treatment,

16. the percentage of episodes that were re-admissions during the year,

17. the percentage of residential treatment episodes lasting over 6 months,

18. the percentage of veterans who either dropped out of residential treatment or who were asked to leave ("kicked out"),

19. the percentage who were living in an institution at the time of discharge,

20. the percentage whose living situation was unknown at discharge,

21. the percentage of veterans who were unemployed at discharge.

Most of these monitors have clear directionality (i.e. extremely large or small values may suggest a departure from program values and goals). In some cases the preferred direction of a monitor may not be as clear as in others. For example, an increase in the percentage of veterans who had been homeless for less than one month is not as clearly a departure from program norms as is a high percentage of veterans who had inappropriateness indicators for residential treatment. However, each of the monitors reflects an important characteristic of either the veterans treated or the services delivered by the program.

It must, once again, be emphasized that these monitors should not be considered, by themselves, to be indicators of the quality of care delivered at particular sites. They can be properly used only to identify statistical outliers, the importance of which must

be determined by follow-up discussions with, or visits to, the sites.[10]

Identification of Statistical Outlier Sites. For each monitor, the data from each site are presented in tabular form (see, for example the number of new intakes for FY 89/90 on Table A-3-1). At the bottom of the column the average value for all sites is presented, along with the standard deviation (e.g. for new intakes in FY 89/90, program average = 201; standard deviation = 81)[11]. Outliers in this monitoring system are defined as those sites falling beyond 95% of the program distribution for each variable. To identify statistical outliers, therefore, the standard deviation was multiplied by 1.68 and the resulting value was either added to or subtracted from the average value for all sites. In this way a value was determined which would discriminate the extreme 5% of sites from the remaining 95%.[12]

On Tables A-3-1 to A-3-12 critical monitors are identified with an asterisk next to them on the table headings. Outlier values are also identified by the presence of an additional asterisk next to values for specific sites listed in that column. To return to our example on Table A-3-1, Augusta and Portland are identified as outliers on the number of annual intakes completed in FY 89/90. We want to re-iterate that this does not mean that these two sites performed inadequately. It merely means, that they are at the extreme low end of the range.

Summary of Outliers

Table A-3-13 summarizes the outlier status of each site on each of the twenty-one critical monitors. It is apparent that the vast majority of sites were found to have been outliers on a small number of variables; nine sites had no outlier values and 32 had

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[10] In some cases the validity of outlier statistics is limited by the small number of cases or observations. In recognition of this limitation values based on fewer than five observations are not noted as outliers.

[11] These data differ somewhat from those presented in Tables 3-1 to 3-4 because they represent averages computed across the 43 sites rather than program totals. The unit of analysis for Tables A-1 to A-12 is the individual site. The unit of analysis for tables concerning the entire program (Tables 3-1 to 3-4) is the individual veteran. The site-average is used in comparing sites to one another to avoid the undue influence of large volume sites on the norms.

[12] Since directionality was explicit these data were regarded as having one-tailed distributions.

two or fewer. A concentration of outliers within a few sites was not found.

Plans for further review

These data have been distributed to the sites for their review and consideration, and have been discussed on a national conference call. VACO and NEPEC have followed up with individual sites concerning specific outlier variables, and these discussions will continue as program planning progresses during the coming year.

CHAPTER 4: CLINICAL PROCESS IN THE HCMI VETERANS PROGRAM - A TWELVE MONTH PERSPECTIVE

When the HCMI Veterans program began, community outreach was a new clinical activity for VA, as it was for many other agencies reaching out to the homeless mentally ill (Caton, 1990). With its focus on actively seeking out the underserved, on facilitating their entry into treatment, and on offering residential treatment as a central feature, the HCMI Veterans program broke new ground for VA. In a recent working paper of the National Institutes of Mental Health Task Force on Homelessness and Severe Mental Illness, the HCMI program was aptly referred to as the "largest natural experiment to date" in providing "non-traditional" services to this troubled population.

Because of its innovative program design, a special clinical process study was instituted to gather detailed longitudinal data on the clinical services provided by the program. While preliminary reports from this clinical process study have already been presented (Rosenheck, Gallup, Leda et al, 1988; Rosenheck, Gallup, Leda et al, 1989; Rosenheck and Gallup, in press) these prior reports concerned only partial samples of the study population, and have covered only the first three months of program involvement. This chapter will present information on the types and frequency of services provided to all 1,795 veterans evaluated at the nine follow-up sites during the 12 months following their intake assessment.

Principal questions addressed in this chapter concern:

- o Duration of involvement in the program.
  - How long do veterans stay involved with the HCMI Veterans program?
  - Among those who terminate, what are the reasons for termination?
- o Treatment relationships.
  - What types of treatment relationships are established in this program and how do they change over time?
  - How frequently are patients seen?
  - Where do therapeutic contacts take place?
  - Are they scheduled or unscheduled?
  - How long do they last?

- o Services provided.
  - What types of services are provided directly by the HCMI Veterans program and what types of services are provided through referral?
  - How many referrals are actually made for each veteran?
  - How does the configuration of services provided change over the course of a year's treatment?
- o Clinician perceptions of benefit from the program.
  - What improvements in clinical problems are noted by clinicians in clinical and residential status at various stages of program involvement?
- o Site Variation.
  - Do city size, total workload and the availability of residential treatment affect the characteristics of the veterans treated or the services provided?
- o Predictors of program involvement and improvement.
  - What is the relationship between specific veteran or site characteristics and sustained involvement in the HCMI Veterans program?
  - What is the relationship between patient involvement in the program and clinical improvement, as perceived by the HCMI clinicians?

A. Methods

Data for the clinical process study were gathered using both the 52-item Intake Form for Homeless Veterans[13], described more fully in Rosenheck, Gallup et al, (1989) and the 97-item Outreach Clinical Process Form[14], completed by program clinicians on each

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[13] Baseline data from the Intake Form for Homeless Veterans include: age, sex, race, current residence, duration of homelessness, access to public financial support, substance abuse and psychiatric problems, medical illnesses and past hospitalizations.

[14] Information recorded on the Outreach Clinical Process Form concerned: 1) whether the patient terminated participation in the program during each three month period, and if so why; 2) the nature of the treatment relationship, including the number, location and duration of clinical contacts; 3) the types of

veteran, every three months, for up to one year after the initial intake assessment.

Descriptive data presented in this chapter reflect both the performance of the study sites as a group and of the individual sites, although the primary emphasis in this presentation is on data from the study as a whole. (Data from the entire study and from each site are presented in Tables A-4-1 to A-4-10 of Appendix A). Information on changes in treatment over the course of the year is presented in two ways. First, data are presented for each of the four quarters on all veterans seen during each quarter. Second, data are presented for each quarter on the subgroup of 173 veterans (10%) who were still involved in the program during the last quarter. It is thus possible to examine trends among <u>all</u> veterans seen in each quarter, and among the smaller group of veterans seen over the full year.

Finally, several multi-variate analyses were conducted to more precisely examine: 1) the influence of veteran and site characteristics on program participation, and 2) the influence of both baseline characteristics and program participation on clinical outcomes, as observed by the HCMI clinicians.

B. Duration of Involvement and Reasons for Termination

Although data on the exact date of the final contact with the program are not available, information was recorded on whether each veteran had clinical contact with an HCMI clinician during each quarter post-intake (i.e. each sequential three month period) (Table 4-1). Consistent with the short-term nature of the HCMI veterans program, the rate of contact with clinicians declined in each quarter following intake. Of the 1,795 veterans originally assessed at the beginning of the first quarter, 480 (27%) were seen during the second quarter (3-6 months after intake), 258 (14%) in the third quarter (6-9 months after intake), and 173 (10%) in the fourth quarter (9-12 months) after intake.

Although many veterans terminate their involvement with the program after a short time others stay involved for more extended periods of time. The rate of termination, among those participating in the program, was 75% during the first quarter, but dropped to 55% in the second and third quarters, and to under a third (31%) in

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services provide both directly by the program and indirectly through referrals; and 4) the clinician's perceptions of clinical improvement and residential status.

TABLE 4-1. INVOLVEMENT AND TERMINATION STATUS BY QUARTER (3 MONTH INTERVALS AFTER INTAKE ASSESSMENT).

	QUARTER 1 = 3 months	QUARTER 2 3-6 months	QUARTER 3 6-9 months	QUARTER 4 9-12 month	TOTAL FULL YEAR*	CHANGES BETWEEN QUARTERS QTR 1-2	QTR 2-3	QTR 3-4
Number of Veterans Involved	1795	480	258	173	1795	-1315	-222	-85
Percent of Original Group (N=1,795)	100%	27%	14%	10%	100%	-73%	-12%	-5%
Status at End of Quarter (for those involved)								
Still Involved	25%	45%	46%	70%	7%	20%	1%	24%
Terminated During This Quarter	70%	49%	50%	31%	93%	-22%	1%	-19%
Terminated This Quarter: Returned Later	5%	6%	5%	0%	N/A	1%	-2%	-5%
TOTAL	100%	100%	100%	100%	100%			
Reason for Termination (of those who terminated)								
1. Did Not Get Involved: Psychopathology	4%	2%	1%	2%	3%	-2%	-1%	1%
2. Did Not Get Involved: Substance Abuse	5%	1%	0%	0%	4%	-5%	-1%	0%
3. Did Not Want Any Assistance	13%	3%	1%	0%	10%	-9%	-2%	-1%
4. Only Wanted Services Not Offered	4%	2%	0%	0%	3%	-2%	-2%	0%
5. Transient: Moved On	15%	10%	4%	8%	13%	-5%	-6%	4%
6. Left To Seek Work or Treatment Elsewhere	10%	8%	4%	2%	9%	-2%	-4%	-2%
7. Terminated Due to Low Tolerance of Constraints	16%	24%	19%	13%	17%	8%	-5%	-6%
8. Accomplished Limited Goals	18%	13%	16%	21%	18%	-5%	4%	4%
9. Accomplished Significant Clinical Goals	8%	22%	34%	43%	13%	14%	11%	10%
10. Other Reason	4%	6%	9%	11%	5%	1%	3%	3%
11. Terminated: Data Missing	3%	10%	12%	0%	5%	7%	3%	-12%
TOTAL	100%	100%	100%	100%	100%			

* Termination data reflect all terminations, including all terminations of veterans who terminated more than once.

the fourth quarter (Table 4-1).[15] Of the original cohort of 1,795 veterans, 121 (7%) were still involved with the program one year after intake assessment.

As far as we can determine, these are the first longitudinal data to be gathered from an outreach program for the homeless mentally ill, starting from the time of the initial program contact. As a consequence comparative figures on rates of sustained involvement from other programs are not available. Two studies offering the most comparable data are the Robert Wood Johnson - Pew Memorial Trust Health Care for the Homeless program and another VA community-based mental health program, the Intensive Psychiatric Community Care program (IPCC). The rate of sustained involvement in the HCMI veterans program is considerably higher than that recorded by the Health Care for the Homeless program, in which only half of clients had more than one contact with the program over one year (Wright and Weber, 1987). On the other hand, it is considerably lower than that recorded in VA's IPCC program in which 87% of veterans were still involved in the program after one year (for a detailed comparison of the IPCC program and the HCMI program see Appendix B). The IPCC program, however, has a much higher staff to patient ratio and is specifically targeted at veterans who make frequent use of VA psychiatric hospital care. It does seem impressive that as many as 25% of HCMI veterans, many of whom were contacted through outreach and had not sought VA services on their own, were still involved in the program after three months.

Our understanding of the issue of program involvement can be extended by examining data on the reasons for termination from the program, as reported by HCMI clinicians (lower half of Table 4-1). These data are presented separately for veterans who terminated in each quarter. Veterans who terminated during the first two quarters were more likely than others to have been unable to participate because of severe psychopathology or substance abuse, or because they were either uninterested in the services offered, or were transients. Not surprisingly, the percentage who terminated primarily because they had accomplished significant goals was highest in later quarters, increasing from 8% of those who terminated in the first quarter, to 43% of those who terminated during the last quarter. It appears that a significant percentage of early terminations were due to lack of interest in treatment while later terminations more often represent successful accomplishment of clinical goals. It should be noted here that veterans may have benefited clinically from the program even though their clinicians felt they terminated because of a lack of continued motivation for treatment.

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[15] In the first through third quarters, about five percent of participants who were reported as terminated were subsequently reinvolved with the program.

There was considerable variation in the duration of involvement among the sites (Table 4-2). In New York City, 91% of veterans terminated during the first quarter and none were participating after one year. In contrast, only 55% terminated during the first quarter in San Francisco, and 25% were still involved after one year. The San Francisco program was located in the "Tenderloin" section of the city, where many homeless people live and the staff made an especially strong commitment to continued community outreach and continuity of care.

C. Treatment Relationships

To assess the focus of treatment relationships, clinicians chose one of eight descriptions to characterize their work with each veteran in each quarter (Table 4-3). During the first quarter a notable emphasis was placed on establishing relationships, on clinical assessment and on making referrals. During subsequent quarters there is a shift to more supportive contacts and monitoring ongoing treatment with other providers. The proportion of veterans involved in either direct rehabilitation with HCMI clinicians (5%-10%) or in psychotherapy (5%-7%) was modest in all quarters.[16] Similar differences across quarters are also evident among the cohort of veterans treated for the entire year (Table 4-4). Facilitating referrals and monitoring ongoing treatment appear to be the most characteristic activities of this program.

Almost one fourth of veterans were seen only once, and 40% were seen 2-5 times (Table 4-3). With an average of 5-7 clinical encounters per quarter (bottom of Table 4-3) contact with veterans in the HCMI Veterans program appears to be moderate in intensity. This finding is consistent with the program's emphasis on making referrals, providing support and monitoring treatment.

Among veterans who were seen over the entire year (Table 4-4), a steady decline in the average number of contacts is apparent, from 9.8 contacts during the first quarter to 4.8 during the last quarter. It appears that veterans are seen almost weekly during the early phases of treatment, but that as treatment progresses and immediate crises are resolved, contacts are less frequent.

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[16] To simplify comparison between sites (Tables A-4-1 to A-4-10) the eight categories of treatment relationship were collapsed into three categories: relationship building (establishing basic relationships, assessment); referral/linkage (supportive contact, made referrals, monitored treatment); and active therapy (direct rehabilitation counselling and direct psychotherapeutic relationship).

TABLE 4.2 DURATION OF INVOLVEMENT IN THE HOME VETERANS PROGRAM AND TERMINATION STATUS, BY SITE

	All Veterans (N=1795)	Cheyenne (N=80)	Dayton (N=239)	Indianapolis (N=138)	Mtn Home (N=133)	New Orleans (N=181)	New York (N=374)	San Diego (N=136)	San Francisco (N=280)	Tucson (N=282)	SITE AVG.	STANDARD DEVIATION	COEFF. OF VARIATION
Duration of involvement													
- 3 months	70%	90%	76%	69%	77%	51%	91%	59%	55%	80%	66%	16%	0.23
3-6 months	13%	31%	14%	21%	16%	17%	6%	13%	14%	7%	15%	7%	0.47
6-9 months	7%	11%	3%	8%	2%	25%	3%	9%	5%	6%	8%	7%	0.83
9-12 months	3%	11%	5%	1%	2%	2%	1%	2%	1%	3%	4%	3%	0.90
- 12 months	7%	9%	3%	1%	3%	3%	0%	17%	25%	4%	7%	7%	1.11
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Reason for termination*													
Too ill to participate	2%	1%	1%	9%	0%	2%	2%	29%	18%	2%	7%	9%	1.28
Not interested in HVP	26%	9%	42%	11%	15%	21%	2%	20%	40%	48%	23%	15%	0.67
Some involvement/improvement	42%	63%	8%	17%	52%	42%	86%	27%	11%	28%	42%	21%	0.49
Significant gains	13%	11%	10%	26%	21%	18%	9%	12%	5%	16%	14%	6%	0.44
Did not terminate	7%	9%	3%	1%	-	3%	0%	13%	25%	5%	7%	7%	1.10
Other	5%	8%	6%	12%	9%	13%	1%	0%	1%	1%	6%	6%	0.91
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		

* Includes only final termination for those who terminated more than once.

TABLE 4-3. TREATMENT RELATIONSHIP AND NUMBER OF CONTACTS, BY QUARTER: ALL HCMI VETERANS IN FOLLOW-UP.

	QUARTER 1 N= 1,795	QUARTER 2 N= 480	QUARTER 3 N= 258	QUARTER 4 N= 173	CHANGES BETWEEN QUARTERS QTR 1-2	QTR 2-3	QTR 3-4
BEST DESCRIPTION OF RELATIONSHIP							
Established Basic Relationship	16%	6%	6%	5%	-10%	0%	-1%
Assessment/Developed Rx. Plan	19%	9%	9%	9%	-10%	1%	0%
Supportive Contact	5%	10%	21%	35%	5%	10%	15%
Made Referrals/Linkage	34%	24%	18%	22%	-10%	-5%	4%
Monitored Treatment	10%	36%	35%	19%	26%	-1%	-16%
Direct Rehabilitation Counselling	10%	7%	6%	5%	-3%	-1%	-1%
Direct Psychotherapeutic Rel.	5%	7%	5%	5%	2%	-2%	0%
Other	1%	1%	0%	1%	0%	-1%	1%
TOTAL	100%	100%	100%	100%			
NUMBER OF CONTACTS WITH HCMI STAFF							
1 Contact	23%	14%	15%	24%	-9%	1%	9%
2 to 5 Contacts	40%	42%	52%	55%	2%	10%	2%
6 to 10 Contacts	22%	28%	19%	14%	5%	-9%	-5%
11 to 20 Contacts	11%	12%	10%	4%	1%	-3%	-6%
More than 20 Contacts	4%	5%	3%	3%	1%	-2%	1%
Data Missing	0%	0%	2%	0%	0%	1%	-2%
TOTAL	100%	100%	100%	100%			
AVERAGE NUMBER OF CONTACTS	6.1	8.7	9.7	4.4	0.8	-11.2	-0.9

TABLE 4-4. TREATMENT RELATIONSHIP AND NUMBER OF CONTACTS, BY QUARTER: VETERANS SEEN IN FOURTH QUARTER.

	QUARTER 1 N= 173	QUARTER 2 N= 140	QUARTER 3 N= 131	QUARTER 4 N= 173	CHANGES BETWEEN QUARTERS QTR 1-2	QTR 2-3	QTR 3-4
BEST DESCRIPTION OF RELATIONSHIP							
Established Basic Relationship	13%	7%	11%	5%	-6%	4%	-6%
Assessment/Developed Rx. Plan	18%	9%	12%	9%	-10%	4%	-3%
Supportive Contact	6%	16%	22%	35%	10%	6%	13%
Made Referrals/Linkage	28%	22%	18%	22%	-6%	-4%	4%
Monitored Treatment	17%	29%	22%	19%	11%	-6%	-3%
Direct Rehabilitation Counselling	3%	4%	7%	5%	0%	3%	-2%
Direct Psychotherapeutic Rel.	13%	14%	8%	5%	0%	-6%	-3%
Other	0%	0%	0%	0%	0%	0%	0%
TOTAL	100%	100%	100%	100%			
NUMBER OF CONTACTS WITH HCMI STAFF							
1 Contact	5%	4%	10%	23%	-2%	6%	13%
2 to 5 Contacts	29%	41%	53%	55%	12%	12%	1%
6 to 10 Contacts	29%	32%	21%	14%	3%	-12%	-6%
11 to 20 Contacts	27%	11%	11%	4%	-16%	-1%	-7%
More than 20 Contacts	9%	11%	5%	3%	3%	-6%	-2%
TOTAL	100%	100%	100%	100%			
AVERAGE NUMBER OF CONTACTS	9.8	8.7	6.6	4.8	-1.1	-2.1	-1.8

D. Location of Contacts, Scheduling and Duration

As expected, a substantial proportion of veterans had contacts with HCMI clinicians in community settings. During the first quarter 23% were contacted at least once in the street, a park, or outdoors; 5% were seen in a soup kitchen; and 46% in a shelter (Table 4-5). Although a significant proportion of veterans thus had at least some clinical contacts in community settings, for most veterans the greatest number of contacts took place at VA clinics (38%-46%) or Vet Centers (5%-26%)(see middle section of Tables 4-5 and 4-6).[17] Data from the cohort of veterans seen during the entire year (Table 4-6) show that among individuals who stayed with the program the percentage who were seen in community settings declined through the year while the percentage seen primarily in VA clinics and Vet Centers increased. As one would expect, contacts in contract residential treatment settings are most frequent during the second quarter, and decline in frequency as veterans completed that part of their treatment.

The fact that some veterans were seen in community settings during the fourth quarter suggests that, in some cases, continuous efforts were made to engage treatment-resistant veterans in the program through the entire year. However, data presented here indicate that most veterans, while initially contacted in the community, were subsequently seen in more conventional settings.

The majority of veterans had a mixture of scheduled and unscheduled contacts (Tables 4-5 and 4-6), reflecting the somewhat informal and non-traditional structure of the HCMI program. Most contacts lasted between fifteen minutes and an hour, although additional clinician time was spent traveling to meet veterans at residential treatment facilities.

E. Services Provided

The HCMI Veterans program offers a diverse array of clinical, rehabilitative and basic material services that are listed in Tables 4-7 and 4-8. Almost all services were provided with the greatest frequency during the first quarter and less often thereafter, a pattern that is consistent with our overall impression that the greatest intensity of intervention occurs early in the program, and is followed by largely supportive or treatment-monitoring contacts.

The greatest number of referrals to VA and non-VA programs were made during the first quarter. Forty percent were referred to more than two VA programs during the first three months, and 33%

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[17] The high proportion of HCMI veterans with contacts in Vet Centers is due to the fact that two programs (San Francisco and Mountain Home) had offices in Vet Center store fronts.

TABLE 4-5. LOCATION OF CONTACTS WITH PROGRAM STAFF, SCHEDULING AND DURATION OF CONTACTS, BY QUARTER: ALL VETERANS IN FOLLOW-UP STUDY.

	QUARTER 1 N=1,795	QUARTER 2 N= 479	QUARTER 3 N= 258	QUARTER 4 N= 173	CHANGES BETWEEN QUARTERS QTR 1-2	QTR 2-3	QTR 3-4
LOCATION OF AT LEAST ONE CONTACT							
Street, Park or Outdoors	23%	19%	17%	15%	-4%	-1%	-3%
Soup Kitchen	5%	8%	6%	5%	2%	-1%	-1%
Homeless Shelter or Mission	46%	12%	9%	9%	-33%	-4%	0%
VA Clinic	72%	74%	71%	54%	2%	-3%	-17%
Vet center	13%	20%	24%	34%	6%	4%	10%
HCMI Residential Treatment Pgm.	29%	50%	36%	16%	22%	-15%	-20%
Place of Work	3%	6%	5%	5%	3%	-1%	0%
Apartment, Room or House	3%	6%	5%	9%	3%	0%	4%
Other	13%	12%	14%	17%	0%	2%	3%
PLACE OF MOST FREQUENT CONTACT							
Street, Park or Outdoors	3%	3%	6%	6%	0%	3%	0%
Soup Kitchen	6%	3%	3%	1%	-3%	1%	-2%
Homeless Shelter or Mission	18%	3%	1%	4%	-15%	-2%	3%
VA Clinic	46%	45%	47%	38%	-1%	2%	-9%
Vet center	5%	12%	14%	26%	7%	2%	12%
HCMI Residential Treatment Pgm.	17%	27%	17%	9%	10%	-10%	-8%
Place of Work	0%	1%	3%	3%	0%	2%	0%
Apartment, Room or House	0%	2%	1%	4%	2%	-1%	2%
Other	5%	5%	7%	9%	-1%	2%	2%
TOTAL	100%	100%	100%	100%			
CONTACTS SCHEDULED							
None	29%	23%	29%	50%	-6%	6%	21%
Some	67%	71%	64%	47%	5%	-8%	-16%
Most	5%	6%	7%	3%	1%	2%	-5%
TOTAL	100%	100%	100%	100%			
DURATION OF CONTACTS							
< 15	4%	8%	7%	12%	5%	-1%	4%
16' - 1 hour	83%	77%	85%	82%	-6%	8%	-3%
> 1 hour	14%	15%	8%	7%	1%	-7%	-1%
TOTAL	100%	100%	100%	100%			

TABLE 4-6. LOCATION OF CONTACTS WITH PROGRAM STAFF, SCHEDULING AND DURATION OF CONTACTS, BY QUARTER: VETERANS SEEN IN LAST QUARTER OF THE FOLLOW-UP YEAR.

	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	CHANGES BETWEEN QUARTERS		
	N= 173	N= 140	N= 131	N= 173	QTR 1-2	QTR 2-3	QTR 3-4
LOCATION OF AT LEAST ONE CONTACT							
Street, Park or Outdoors	32%	19%	18%	15%	-14%	-1%	-3%
Soup Kitchen	23%	15%	11%	5%	-8%	-4%	-5%
Homeless Shelter or Mission	32%	9%	8%	9%	-23%	-2%	1%
VA Clinic	71%	70%	65%	54%	-1%	-5%	-11%
Vet center	32%	33%	37%	34%	0%	4%	-3%
HCMI Residential Treatment Pgm.	39%	41%	27%	16%	2%	-14%	-12%
Place of Work	7%	4%	7%	5%	-3%	3%	-2%
Apartment, Room or House	5%	9%	6%	9%	4%	-2%	3%
Other	24%	14%	17%	17%	-10%	3%	0%
PLACE OF MOST FREQUENT CONTACT							
Street, Park or Outdoors	1%	2%	4%	6%	1%	2%	2%
Soup Kitchen	6%	5%	6%	1%	-1%	1%	-5%
Homeless Shelter or Mission	6%	1%	2%	4%	-4%	0%	3%
VA Clinic	38%	38%	38%	38%	0%	0%	0%
Vet center	18%	3%	22%	26%	-16%	20%	4%
HCMI Residential Treatment Pgm.	19%	21%	15%	9%	2%	-6%	-6%
Place of Work	1%	1%	3%	3%	0%	2%	0%
Apartment, Room or House	0%	2%	1%	4%	2%	-1%	3%
Other	11%	4%	9%	9%	-7%	5%	0%
TOTAL	100%	100%	100%	100%			
CONTACTS SCHEDULED							
None	15%	26%	28%	50%	11%	2%	22%
Some	83%	69%	66%	47%	-13%	-3%	-19%
Most	2%	4%	5%	3%	2%	1%	-2%
TOTAL	100%	100%	100%	100%			
DURATION OF CONTACTS							
< 15'	2%	3%	3%	11%	1%	0%	8%
16'- 1 hour	80%	78%	87%	82%	-2%	9%	-5%
> 1 hour	18%	19%	10%	7%	1%	-8%	-11%
TOTAL	100%	100%	100%	100%			

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TABLE 4-7. SERVICES PROVIDED DURING THE FIRST YEAR OF INVOLVEMENT IN THE HCMI VETERANS PROGRAM, BY QUARTER: ALL ELIGIBLE VETERANS AT THE NINE FOLLOW-UP SITES.

	1ST QTR (N=1,696)	2ND QTR (N=478)	3RD QTR. (N=257)	4TH QTR. (N=173)	CHANGES BETWEEN QUARTERS QTR 1-2	QTR 2-3	QTR 3-4
SERVICES PROVIDED DIRECTLY BY HCMI PROGRAM							
Mental Health Assessment or Treatment	85%	74%	73%	73%	-11%	-2%	0%
Medical Assessment or Treatment	65%	50%	38%	27%	-15%	-12%	-11%
Substance Abuse Treatment	53%	44%	40%	31%	-9%	-4%	-8%
Food	40%	24%	22%	16%	-15%	-3%	-6%
Clothing	30%	24%	21%	11%	-6%	-3%	-10%
HCMI Program Contract Residential Rx.	33%	56%	39%	20%	22%	-16%	-19%
Money Management Assistance	19%	30%	21%	15%	11%	-8%	-6%
Job Counselling	41%	36%	23%	14%	-5%	-13%	-9%
Day Program	9%	20%	31%	43%	10%	11%	12%
Transportation	48%	44%	33%	24%	-4%	-10%	-9%
Family Treatment	5%	5%	7%	6%	1%	1%	-1%
Crisis Intervention	53%	35%	32%	21%	-18%	-4%	-11%
Contact at Long Term Health Facility	8%	7%	4%	4%	-1%	-3%	0%
LINKAGE OR REFERRAL WITH OTHER PROVIDERS							
Mental Health Outpatient Treatment	54%	51%	45%	34%	-3%	-6%	-11%
Psychiatric Hospitalization	5%	6%	3%	5%	0%	-3%	2%
Medical Outpatient Treatment	44%	43%	30%	16%	-1%	-13%	-14%
Medical Hospitalization	4%	4%	5%	1%	-1%	1%	-3%
Detoxification	18%	8%	5%	2%	-10%	-3%	-3%
Substance Abuse Treatment	47%	47%	38%	23%	0%	-9%	-16%
Food	34%	23%	23%	18%	-12%	0%	-4%
Clothing	25%	18%	15%	8%	-7%	-3%	-7%
Immediate Shelter	57%	32%	20%	13%	-25%	-12%	-7%
VA Disability Claim	10%	13%	10%	5%	2%	-3%	-5%
Non-VA Public Support Payment	23%	19%	15%	8%	-3%	-4%	-7%
Conservator of Funds	1%	0%	1%	1%	-1%	0%	0%
Job Training Program	33%	27%	21%	12%	-5%	-6%	-10%
Documents or Identification	20%	15%	15%	9%	-5%	0%	-6%
Community Housing Referral	25%	21%	17%	14%	-4%	-4%	-3%
Non VA Residential Treatment	7%	4%	4%	2%	-4%	1%	-2%
Long Term Health Care	5%	8%	7%	5%	3%	-2%	-2%
Placement in Community Residential Care	16%	11%	5%	4%	-5%	-6%	-1%
NUMBER OF REFERRALS							
To VA Programs							
None	10%	20%	24%	36%	10%	4%	12%
1-2	50%	59%	64%	57%	8%	6%	-7%
> 2	40%	21%	12%	7%	-18%	-10%	-5%
To Non-VA Programs							
None	20%	21%	27%	45%	1%	6%	17%
1-2	48%	62%	60%	48%	15%	-2%	-12%
> 2	33%	17%	13%	8%	-16%	-4%	-5%

TABLE 4-8. SERVICES PROVIDED DURING THE FIRST YEAR OF INVOLVEMENT IN THE HCMI VETERANS PROGRAM, BY QUARTER: VETERANS SEEN DURING THE LAST QUARTER.

	1ST QTR (N=173)	2ND QTR (N=140)	3RD QTR. (N=131)	4TH QTR. (N=173)	CHANGES BETWEEN QUARTERS QTR 1-2	QTR 2-3	QTR 3-4
SERVICES PROVIDED DIRECTLY BY HCMI PROGRAM							
Mental Health Assessment or Treatment	90%	82%	79%	73%	-8%	-3%	-6%
Medical Assessment or Treatment	78%	61%	42%	27%	-17%	-18%	-15%
Substance Abuse Treatment	48%	43%	37%	31%	-5%	-6%	-6%
Food	33%	19%	16%	16%	-13%	-3%	-1%
Clothing	22%	19%	18%	11%	-3%	0%	-7%
HCMI Program Contract Residential Rx.	48%	45%	28%	20%	-3%	-17%	-7%
Money Management Assistance	25%	33%	21%	15%	8%	-12%	-6%
Job Counselling	37%	32%	23%	14%	-5%	-9%	-9%
Day Program	23%	33%	45%	43%	10%	12%	-2%
Transportation	64%	50%	35%	24%	-14%	-15%	-11%
Family Treatment	6%	6%	5%	6%	0%	-1%	0%
Crisis Intervention	56%	48%	38%	21%	-9%	-10%	-17%
Contact at Long Term Health Facility	5%	7%	6%	4%	2%	-1%	-2%
LINKAGE OR REFERRAL WITH OTHER PROVIDERS							
Mental Health Outpatient Treatment	56%	53%	45%	34%	-4%	-8%	-12%
Psychiatric Hospitalization	11%	10%	5%	5%	-1%	-5%	1%
Medical Outpatient Treatment	57%	43%	27%	16%	-14%	-16%	-11%
Medical Hospitalization	3%	3%	4%	1%	0%	1%	-3%
Detoxification	14%	11%	5%	2%	-3%	-5%	-3%
Substance Abuse Treatment	41%	42%	30%	23%	1%	-12%	-7%
Food	25%	24%	24%	18%	-1%	0%	-5%
Clothing	18%	16%	15%	8%	-2%	-1%	-6%
Immediate Shelter	47%	31%	18%	13%	-16%	-14%	-5%
VA Disability Claim	5%	14%	10%	5%	8%	-4%	-5%
Non-VA Public Support Payment	20%	25%	13%	8%	5%	-12%	-5%
Conservator of Funds	1%	1%	2%	1%	0%	1%	-1%
Job Training Program	27%	21%	23%	12%	-6%	2%	-11%
Documents or Identification	19%	23%	15%	9%	4%	-8%	-7%
Community Housing Referral	18%	22%	18%	14%	4%	-5%	-4%
Non VA Residential Treatment	5%	5%	5%	2%	0%	0%	-3%
Long Term Health Care	3%	7%	9%	5%	4%	2%	-5%
Placement in Community Residential Care	13%	11%	2%	4%	-1%	-9%	2%
NUMBER OF REFERRALS							
To VA Programs							
None	9%	14%	21%	36%	6%	7%	14%
1-2	52%	61%	63%	57%	10%	2%	-6%
> 2	40%	24%	15%	7%	-15%	-9%	-8%
To Non-VA Programs							
None	16%	21%	30%	45%	4%	9%	15%
1-2	47%	55%	58%	48%	8%	3%	-10%
> 2	37%	24%	12%	8%	-12%	-12%	-5%

were referred to more than two non-VA programs. The number of referrals declines in subsequent quarters but remains substantial, with over half of all veterans seen between 9 and 12 months referred to at least one service (Table 4-7).

Residential treatment is, perhaps, the most important clinical service offered by the HCMI Veterans program and has been shown to be the service most strongly associated with both program involvement and with clinical improvement (Rosenheck, Gallup, Leda et al, 1989). A total of 566 veterans (32%) were admitted to residential treatment during the study year. Among those admitted, the average number of days of residential treatment was 87, with 26% of those admitted to residential treatment staying less than 30 days, 36% 31-90 days; 30% 91-180 days and 8% over 180 days.

Table 4-9 shows the percentage of veterans receiving residential treatment during each quarter, among all program participants and among the cohort seen throughout the year. As noted previously, involvement in residential treatment was most frequent during the first six months after the intake assessment.

F. Clinical Improvement and Residential Status

After each quarter in which a veteran was seen, his or her clinician assessed whether there had been clinical improvement in eight problem areas. Tables 4-10 and 4-11 show, for each problem area, the percentage of veterans with each problem, and the percentage judged to have shown improvement during that three month period. The proportion of veterans manifesting problems in each of these eight areas was consistent and quite high throughout the year (Table 10). The proportion judged to have shown improvement was also quite high and reflects, to some degree, the positive bias of the HCMI clinicians, but also provides encouraging information about the effectiveness of the program.

Altogether 24-51% were reported as showing clinical improvement during the first quarter, including 40% of those with alcohol problems, 37% of those with drug abuse problems, 41% of those with psychoses and 45% of those with non-psychotic psychiatric problem. Improvement rates for alcohol abuse and non-psychotic psychiatric problems were considerably higher in subsequent quarters with about 70% of those with alcohol problems showing improvement and 65-71% of those with non-psychotic psychiatric problems. These trends most likely reflect the fact that a substantial number of veterans who left the program after a brief period of involvement had not shown significant clinical improvement.

Data on veterans seen during the entire year (Table 4-11) show that the proportion of veterans reported to have shown improvement during the first quarter was greater than in subsequent quarters. Among these veterans the greatest degree of improvement occurred

TABLE 4-9. CONTRACT RESIDENTIAL TREATMENT, BY QUARTER.

ALL VETERANS IN FOLLOW-UP

	QUARTER 1 N= 1,795	QUARTER 2 N= 480	QUARTER 3 N= 258	QUARTER 4 N= 173	CHANGES BETWEEN QUARTERS QTR 1-2	QTR 2-3	QTR 3-4
CONTRACT RESIDENTIAL TREATMENT	30%	54%	42%	20%	24%	-12%	-23%
NO RESIDENTIAL TREATMENT	70%	46%	58%	81%			

VETERANS SEEN IN THE LAST QUARTER

	QUARTER 1 N= 173	QUARTER 2 N= 140	QUARTER 3 N= 131	QUARTER 4 N= 173	CHANGES BETWEEN QUARTERS QTR 1-2	QTR 2-3	QTR 3-4
CONTRACT RESIDENTIAL TREATMENT	44%	44%	27%	20%	0%	-18%	-7%
NO RESIDENTIAL TREATMENT	56%	56%	73%	80%			

TABLE 4-10. VETERANS WITH SPECIFIED PROBLEMS AND CLINICIAN JUDGMENTS OF IMPROVEMENT, BY QUARTER: ALL VETERANS IN FOLLOW-UP STUDY.

	QUARTER 1 N=1,795	QUARTER 2 N= 479	QUARTER 3 N= 258	QUARTER 4 N= 173	CHANGES BETWEEN QUARTERS QTR 1-2	QTR 2-3	QTR 3-4
Clinical Problem Area							
Alcohol Abuse							
Percent with Problem	67%	66%	69%	69%	-1%	3%	1%
Percent with Problem who Improved	40%	69%	71%	65%	29%	1%	-6%
Drug Abuse							
Percent with Problem	39%	32%	37%	42%	-7%	5%	5%
Percent with Problem who Improved	37%	64%	70%	64%	27%	5%	-6%
Psychosis							
Percent with Problem	25%	25%	23%	23%	0%	-2%	0%
Percent with Problem who Improved	41%	66%	73%	67%	26%	6%	-6%
Other Psychiatric Problem							
Percent with Problem	54%	64%	72%	82%	10%	8%	10%
Percent with Problem who Improved	45%	71%	66%	65%	26%	-5%	-1%
Medical Problem							
Percent with Problem	57%	59%	60%	62%	1%	2%	2%
Percent with Problem who Improved	51%	78%	72%	69%	28%	-7%	-2%
Social Support/Skills Problems							
Percent with Problem	63%	67%	67%	72%	4%	1%	4%
Percent with Problem who Improved	33%	73%	66%	59%	40%	-7%	-7%
Employment Problems							
Percent with Problem	82%	85%	89%	89%	3%	3%	0%
Percent with Problem who Improved	24%	46%	46%	40%	22%	0%	-7%
Financial Problems							
Percent with Problem	88%	88%	91%	91%	0%	4%	-1%
Percent with Problem who Improved	30%	60%	60%	55%	30%	0%	-5%

TABLE 4-11. VETERANS WITH SPECIFIED PROBLEMS AND CLINICIAN JUDGMENTS OF IMPROVEMENT, BY QUARTER: VETERANS SEEN IN FOURTH QUARTER.

	QUARTER 1 N=173	QUARTER 2 N= 155	QUARTER 3 N= 148	QUARTER 4 N= 173	CHANGES BETWEEN QUARTERS QTR 1-2	QTR 2-3	QTR 3-4
Clinical Problem Area							
Alcohol Abuse							
Percent with Problem	65%	63%	70%	72%	-2%	6%	3%
Percent with Problem who Improved	77%	69%	69%	65%	-8%	0%	-4%
Drug Abuse							
Percent with Problem	39%	39%	41%	43%	0%	2%	2%
Percent with Problem who Improved	74%	65%	72%	64%	-9%	7%	-8%
Psychosis							
Percent with Problem	35%	32%	29%	23%	-3%	-2%	-6%
Percent with Problem who Improved	81%	77%	87%	67%	-4%	10%	-20%
Other Psychiatric Problem							
Percent with Problem	66%	75%	81%	85%	9%	7%	4%
Percent with Problem who Improved	76%	79%	67%	65%	2%	-12%	-2%
Medical Problem							
Percent with Problem	65%	68%	67%	65%	3%	0%	-2%
Percent with Problem who Improved	69%	70%	71%	69%	1%	1%	-2%
Social Support/Skills Problems							
Percent with Problem	76%	79%	78%	75%	3%	-1%	-4%
Percent with Problem who Improved	76%	85%	70%	59%	9%	-14%	-11%
Employment Problems							
Percent with Problem	87%	93%	93%	92%	5%	0%	-1%
Percent with Problem who Improved	47%	39%	46%	40%	-7%	6%	-6%
Financial Problems							
Percent with Problem	91%	98%	97%	95%	6%	-1%	-2%
Percent with Problem who Improved	56%	65%	66%	55%	8%	1%	-10%

early in the program while later efforts were presumably directed at consolidating these gains.

Tables 4-12 and 4-13 show the usual housing status of veterans seen by the program during each quarter, as reported by their clinicians. A steady, but modest, improvement is apparent over time. Among veterans seen during the first quarter (Table 4-12), the vast majority had slept at least one night with no residence (54%) or in a homeless shelter (73%). By the end of the quarter only 6% had usually slept without any residence and only 38% had usually slept in a shelter or mission. By the fourth quarter only 6% had no residence and only 13% were living in a shelter, while 38% had their own apartment, room or house, and another 13% were staying in the apartment, room or house of someone else. The percentage who were still homeless after a year of contact with the program (19%) reflects both the significant difficulties encountered in working with this population, and the persistence of HCMI clinicians who worked with some veterans who remained highly resistent to changing their lifestyles.

Among those seen for the entire year (Table 4-13), 15% had been living in their own, or someone else's, apartment, room or house at the time of intake while 20% were domiciled by the end of the first quarter, and 51% at the end of the year. While this improvement in residential status is substantial, it also suggests the need for additional program efforts in the area of housing placement.

G. Site Variation

One of the unique features of the HCMI Veterans program is the broad diversity of settings in which it operates, ranging from some of the largest metropolises in the world to small cities with populations of less than 50,000. Because of differences in local circumstances and resources, clinical emphasis and program operation often vary from site to site.

To examine more closely the influence of three site characteristics (city size, workload size and the availability of residential treatment) on program operation, the nine sites were rank ordered on these three site characteristics (Table 4- 14). Correlation coefficients were then calculated between site rank on each of the three characteristics, and various patient characteristics and service delivery variables (Table 4-15).

It is apparent from the data presented in Table 4-15 that programs operating in large population centers are quite different from those in smaller cities. In larger cities homeless veterans are more often black or hispanic and more likely to have drug problems, but less likely to have alcohol problems. From the service delivery perspective, veterans in large cities were more frequently contacted through outreach, less frequently admitted to

TABLE 4-12. CLINICAN REPORTS OF KNOWN RESIDENTIAL STATUS, BY QUARTER: ALL VETERANS IN FOLLOW-UP STUDY.

	QUARTER 1 N=1,795	QUARTER 2 N= 479	QUARTER 3 N= 258	QUARTER 4 N= 173	CHANGES BETWEEN QUARTERS QTR 1-2	QTR 2-3	QTR 3-4
WHERE SLEPT AT LEAST ONE NIGHT DURING PAST QUARTER							
No Residence	54%	22%	21%	20%	-33%	-1%	-1%
Homeless Shelter or Mission	73%	30%	27%	24%	-43%	-2%	-3%
HCMI Residential Treatment Pgm.	33%	56%	42%	20%	23%	-14%	-22%
Non-HCMI Residential Treatment	12%	9%	11%	8%	-2%	2%	-4%
Institution (Hospital, Jail)	35%	22%	20%	24%	-13%	-2%	3%
Own Apartment, Room or House	13%	27%	39%	48%	14%	12%	9%
Other's Apartment, Room or House	29%	31%	30%	25%	2%	-1%	-4%
Other	7%	7%	5%	5%	-1%	-2%	0%
WHERE USUALLY SLEPT IN PAST QUARTER							
No Residence	10%	4%	4%	6%	-6%	0%	2%
Homeless Shelter or Mission	38%	12%	9%	13%	-26%	-3%	4%
HCMI Residential Treatment Pgm.	24%	40%	24%	12%	16%	-16%	-12%
Non-HCMI Residential Treatment	4%	4%	6%	6%	0%	2%	0%
Institution (Hospital, Jail)	7%	7%	10%	9%	-1%	3%	-1%
Own Apartment, Room or House	5%	16%	33%	38%	11%	17%	5%
Other's Apartment, Room or House	8%	14%	12%	13%	6%	-2%	1%
Other	5%	3%	2%	3%	-1%	-1%	1%
TOTAL	100%	100%	100%	100%			
WHERE SLEEPING AT TIME OF LAST CONTACT WITH CLINICIAN							
No Residence	10%	4%	7%	8%	-5%	3%	1%
Homeless Shelter or Mission	37%	13%	9%	13%	-25%	-4%	4%
HCMI Residential Treatment Pgm.	23%	35%	20%	14%	12%	-15%	-6%
Non-HCMI Residential Treatment	4%	5%	8%	5%	1%	3%	-3%
Institution (Hospital, Jail)	8%	8%	9%	12%	0%	1%	3%
Own Apartment, Room or House	6%	18%	29%	35%	12%	11%	6%
Other's Apartment, Room or House	7%	12%	13%	10%	5%	1%	-3%
Other	5%	4%	4%	2%	-1%	-1%	-2%
TOTAL	100%	100%	100%	100%			

TABLE 4-13. RESIDENTIAL STATUS OF VETERANS WHO WERE SEEN IN THE FOURTH QUARTER.

	QUARTER 1 N= 173	QUARTER 2 N= 140	QUARTER 3 N= 131	QUARTER 4 N= 173	CHANGES BETWEEN QUARTERS QTR 1-2	QTR 2-3	QTR 3-4
WHERE SLEPT AT LEAST ONE NIGHT DURING PAST QUARTER							
No Residence	44%	20%	18%	20%	-24%	-2%	2%
Homeless Shelter or Mission	60%	29%	24%	24%	-31%	-6%	1%
HCMI Residential Treatment Pgm.	45%	45%	27%	20%	0%	-18%	-7%
Non-HCMI Residential Treatment	16%	11%	13%	8%	-5%	2%	-5%
Institution (Hospital, Jail)	38%	24%	24%	24%	-14%	-1%	0%
Own Apartment, Room or House	19%	38%	37%	48%	19%	0%	11%
Other's Apartment, Room or House	26%	34%	25%	25%	8%	-8%	0%
Other	5%	6%	5%	5%	2%	-2%	1%
WHERE USUALLY SLEPT IN PAST QUARTER							
No Residence	10%	4%	8%	6%	-6%	4%	-3%
Homeless Shelter or Mission	19%	9%	8%	13%	-11%	-1%	6%
HCMI Residential Treatment Pgm.	37%	30%	20%	12%	-7%	-10%	-8%
Non-HCMI Residential Treatment	6%	7%	8%	6%	1%	0%	-1%
Institution (Hospital, Jail)	5%	9%	12%	9%	4%	3%	-4%
Own Apartment, Room or House	10%	25%	32%	38%	15%	7%	6%
Other's Apartment, Room or House	10%	13%	10%	13%	3%	-3%	3%
Other	2%	3%	2%	3%	1%	-1%	1%
TOTAL	100%	100%	100%	100%			
WHERE SLEEPING AT TIME OF LAST CONTACT WITH CLINICIAN							
No Residence	11%	6%	7%	8%	-5%	0%	1%
Homeless Shelter or Mission	10%	10%	10%	13%	0%	0%	3%
HCMI Residential Treatment Pgm.	38%	24%	18%	14%	-14%	-6%	-4%
Non-HCMI Residential Treatment	8%	6%	10%	5%	-2%	3%	-5%
Institution (Hospital, Jail)	6%	7%	9%	12%	2%	1%	3%
Own Apartment, Room or House	15%	27%	30%	35%	12%	3%	5%
Other's Apartment, Room or House	7%	14%	12%	10%	7%	-1%	-2%
Other	4%	4%	4%	2%	0%	0%	-2%
TOTAL	100%	100%	100%	100%			

TABLE 4-14 - SITE CHARACTERISTICS AND RANK ORDER.

Site	Population	Pop. Rank	Workload	Wkld. Rank	Admissions to Res. Rx.	Adm. Rank
New York, NY	9,120,346	1	324	1	14	9
San Francisco, CA	3,250,630	2	280	3	34	7
San Diego, CA	1,861,846	3	138	6	51	6
New Orleans, LA	1,187,073	4	181	5	86	3
Indianapolis, IN	1,166,575	5	138	7	103	1
Dayton, OH	830,070	6	239	4	88	2
Tucson, AZ	531,443	7	282	2	30	8
Mountain Home, TN	433,638	8	133	8	63	5
Cheyenne, WY	25,000	9	80	9	64	4

TABLE 4-15. CORRELATION OF RANK ORDERED SITE CHARACTERISTICS WITH VETERAN CHARACTERISTICS, SERVICES DELIVERED AND RESIDENCE AT THE TIME OF LAST CONTACT WITH THE PROGRAM.

	City Population	Workload Volume	Number of Residential Placement
Age	-0.05	NS	NS
Male	NS	NS	NS
Black	0.36 ***	0.22 ***	-0.11 ***
Hispanic	0.08 *	NS	-0.12 ***
Homeless < 1 month	NS	0.07 ***	-0.12 ***
Homeless > 1 year	NS	NS	NS
Public Support	NS	0.13 ***	-0.14 ***
Psychiatric Symptoms	NS	NS	-0.14 ***
Alcohol Problem	-0.10 ***	NS	NS
Drug Problem	0.16 ***	0.14 ***	-0.14 ***
Dual Diagnosis	NS	NS	-0.15 ***
Contacted Through Outreach	0.19 ***	0.29 ***	-0.26 ***
Duration of Program Involvement	NS	-0.13 ***	0.10 ***
Contract Residential Treatment	-0.26 ***	-0.48 ***	0.45 ***
HCMI Clinical Contacts	-0.11 ***	-0.18 ***	0.17 ***
Significant Gains at Termination	-0.09 ***	-0.09 **	0.10 ***
Living in an Apartment, Room or House	-0.10 ***	-0.08 *	NS
City Population		0.54 ***	-0.41 ***
Workload Volume	0.54 ***		-0.74 ***
Number of Residential Placements	-0.41 ***	-0.74 ***	

Key: * = p < .01; ** = p< .001; *** = p< .0001.
NS = not significant

residential treatment and less likely to have made significant gains at the time of termination, or to be living in an apartment, room or house. Workload volume is also highest in larger cities. It appears from these data that, programs in large cities work less intensively with larger numbers of veterans than those in smaller cities. These data may suggest that treatment resources are in particularly short supply in large cities and that, in response to the lack of resources, clinicians shifted their emphasis to the referral and advocacy components of the program.

As we have seen, high workload volume is particularly characteristic of programs in large cities. It follows that high volume is associated with many of the same characteristics observed in programs in high population areas (Table 4-15). A greater percentage of blacks are seen at high volume sites, where more emphasis is placed on outreach. It is particularly noteworthy that workload volume is strongly negatively correlated with the number of residential treatment placements ($r=-0.74$; $p < .0001$). When greater numbers of veterans are placed in residential treatment, fewer are contacted overall, presumably because greater emphasis is placed on working intensively with those admitted to residential treatment.

Follow-up sites with larger numbers of residential treatment placements treat fewer minority veterans (most likely because they are located in smaller cities) and fewer veterans with psychiatric symptoms, drug abuse or dual diagnosis, and conduct less outreach. Sites with higher residential placements also score higher on measures of program participation, such as duration of involvement and the number of clinical contacts; as well as on residential status such as living in an apartment room or house at last contact (Table 4-15). To summarize these site level data, it appears that sites located in large cities tend to have larger workloads. These sites do more outreach and place fewer veterans in residential treatment, emphasizing, instead, referral and advocacy. Sites in smaller cities are able to provide more intensive services, primarily to veterans admitted to residential treatment.

H. Predictors of Program Participation and Outcome

In the final section of this chapter, we examine the relationship between individual veteran characteristics and program participation, and between program participation and clinician outcome assessments, seeking to address two questions: 1) which veterans participate most actively in the HCMI Veterans program, and 2) what services are most predictive of successful outcome? Two multi-variate statistical methods were used in these analyses: logistic regression analysis, the method of choice for dichotomous (i.e. yes vs. no) dependent variables and ordinary least squares (OLS) multiple regression analysis for continuous or ordinal dependent variables.

The results of these two methods of analysis are presented in somewhat different format and require a brief explanation. In logistic regression analysis the results are adjusted odds ratios. These odds ratios reflect the influence of each independent variable on the relative likelihood of the two outcomes, controlling for the other variables in the model. When the adjusted odds ratio is greater than 1.0 the outcome under consideration is more likely than the alternative. When the adjusted odds ratio is less than 1.0 the outcome is less likely than the alternative[18].

In OLS multiple regression analysis, in contrast, the results of the analyses are reported as standardized regression coefficients ranging from 0-1. These regression coefficients indicate the strength of association between each independent variable and the dependent variable, statistically controlling for the other variables in the model.

Variables used to construct the models were selected because they had significant zero-order (e.g. bivariate) associations with the dependent variables, as determined through correlation analysis. Over sixty variables reflecting baseline veteran characteristics and program participation were examined for possible inclusion in the models. In addition, the bivariate relationship of each site to each dependent variables was also examined.[19]

Predictors of Program Participation

Three measures of program participation were examined: 1) admission to residential treatment, 2) the duration of program participation (measured in the number of quarters of participation) and 3) the number of program contacts (Table 4-16). Admission to residential treatment was most positively associated with a history of past psychiatric or substance abuse hospitalization and negatively associated with initial contact through outreach, with having access to public financial support, with medical problems

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[18] When one of the independent variables has more than one level, the odds ratio reflects the relative increase in likelihood of the dependent variable for each unit increase in the independent variable. For such variables either the interval or the number of levels is indicated on Table 4-16 to 4-17.

[19] In those instances in which a particular outcome was highly associated with a particular site, the conservative assumption was made that the results reflect idiosyncratic reporting at that site rather than substantive differences in patient characteristics. The effects of that site were statistically removed from the multivariate model through partial correlation analysis. All results presented for the multivariate analyses have a probability of less than .05.

TABLE 4-16. MULTI-VARIATE ANALYSIS OF PREDICTORS OF PROGRAM PARTICIPATION AND OUTCOME.

Dependent Variables (Program Participation)	Admitted to Residential Treatment	Duration of Involvement	Number of Contacts
R-square	9.6%	11.3%	24.4%
	Odds Ratio*	Regression Coeff.*	Regression Coeff.*
Any Public Support	0.8		
Psychiatric Symptoms		0.11	
Medical Problems	0.8		
Past Psychiatric or Substance Abuse Hospitalization	1.6		
Contacted Through Outreach	0.5		-0.04
Seen At VA Clinic in 1st Qtr.		0.08	
Any Residential Treatment		0.30	0.08
Total Number of Contacts			
City Population (Site Rank Order) (9 levels)	0.8		
Site Workload (Rank Order) (9 levels)			0.09

* = all odds ratios and regression coefficients are significant at the $p < .05$ level.

and with being seen in a city with a large population. The strong association between admission to residential treatment and past hospitalization may reflect both the greater severity of symptoms among veterans who had been previously hospitalized, and their greater tolerance of the demands of the residential treatment programs. Not surprisingly, veterans contacted through outreach (veterans who had not initiated treatment on their own) were less likely to be admitted to residential treatment, most likely because their problems were less severe and because they were less interested in intensive treatment.

Admission to residential treatment was, by far, the most powerful predictor of both prolonged involvement in the program (beta = 0.30; p <.0001) and of larger numbers of contacts (beta = 0.58; p <.0001)(Table 4-16).

Predictors of Outcome

The total number of contacts with the program, along with admission to residential treatment, were the strongest predictors of improvement in each of nine problem areas (Table 4-17). The likelihood of clinical improvement or being housed at the time of last contact was 1.3 to 1.9 times higher for each increase in the level of the number of contacts variable (1 contact; 2-3; 4-9; 10-24; ≥25) and 1.3 to 1.5 times higher among those admitted to residential treatment, as compared to those not admitted[20].

It should be noted that some baseline characteristics were also significantly associated with several outcome measures. Women were 3.0 times more likely than men to be housed at the time of last contact with the program, and veterans who had been homeless for less than a month were consistently more likely than other veterans to show improvement (on five of the ten outcome variables).

It must be recalled that the data presented here are clinician reports, not objective outcome measures, and that the clinicians' investment in their own efforts may add a significant bias to these reports. They nonetheless suggest that: 1) veterans without prior institutional care, and veterans who have been homeless for over one month are more difficult than others to engage and treat, and that 2) the number of clinical contacts with the program and admission to residential treatment are the most powerful predictors

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[20] To further examine predictors of clinical outcome a composite index of all 8 clinical improvement indicators was created (chronbach's alpha=.80). Multiple regression analysis of factors influencing this improvement index showed that the strongest predictors of high improvement were admission to residential treatment (beta=0.16, p<.0001) and the total number of program contacts (beta=0.16, p<.001).

TABLE 4-17. LOGISTIC REGRESSION ANALYSIS OF CLINICAL IMPROVEMENT AND RESIDENTIAL STATUS

Dependent Variables (Yes/No Improvement)	Alcohol Problems	Drug Problems	Psychotic Symptoms	Other Psych Sx.	Medical Problems	Social Problems	Employment Problems	Financial Problems	Housed
N=	1,029	595	357	842	826	932	1,109	1,162	1,551
R-square	0.22	0.22	0.22	0.26	0.17	0.22	0.10	0.09	0.16
Independent Variables									
Age (10 year interval)							0.8		
Female									3.0
Dually Diagnosed		0.7							
Medical problem		1.7							
Homeless > 1 month	1.5			2.4		1.8	1.4		2.3
Medical Problems									
Contacted Through Outreach									
Seen At VA Clinic in 1st Qtr.									
Any Residential Treatment	1.3	1.5		1.5	1.3	1.3	1.3		
Total Number of Contacts (5 levels)	1.6	1.6	1.8	1.5	1.3	1.9	1.6	1.9	1.3
Number of Referrals (3 levels)				1.6	2.1	1.8	1.8		
Duration of Involvement (5 levels)						0.9	0.9		1.6
City Population (Site Rank Order: 9 levels)									0.9

* All odds ratios are significant at p <.05.

of positive outcome.

I. Conclusion

This chapter has presented what are perhaps the most extensive data yet available on the process of community outreach and treatment of the homeless mentally ill. They show that the HCMI program has undertaken a uniquely complex and difficult clinical challenge. It has successfully engaged substantial numbers of homeless chronically mentally ill veterans in treatment and one fourth of them continue to be involved in the program, three months after intake. While the program delivers a wide range of health care, social rehabilitative and basic material assistance, its primary focus appears to be on linking homeless mentally ill veterans with a variety of VA and non-VA providers, and on supporting their continued involvement in treatment. On average veterans participating in the program are seen twice per month with about 15% seen on a weekly basis, a moderate level of intensity appropriate to this kind of clinical work. In this sample about 30% were admitted to residential treatment. Although the majority of veterans had some community-based clinical care, most ongoing clinical work eventually takes place in VA health care facilities. Analysis of clinician reports suggests that program participation, and more specifically residential treatment are the factors most strongly associated with clinical improvement in virtually all clinical problem areas.

CHAPTER 5 - NEW DEVELOPMENTS AND CONCLUSIONS

The HCMI Veterans program was established in 1987 as a response to an emerging national crisis that demanded immediate attention. The major objective of the program, during its early years, has been to activate basic community-oriented clinical teams in as many cities as possible, as rapidly as possible. Over the past three years, through experience with over 30,000 homeless veterans, clinicians in the HCMI Veterans program have gained a great deal of knowledge and skill concerning the challenges encountered in treating the homeless mentally ill. The vast majority of veterans evaluated by this program have expressed a strong and sincere interest in treatment. Nevertheless their problems are many and complex and they suffer from multiple psychiatric and medical conditions as well as from numerous functional deficits. The program has had great success in making contact with these veterans, in assessing their needs and in enhancing their access to VA and non-VA health care services including residential treatment. Nevertheless, as data presented in this report show, many veterans leave treatment before it is completed. Also, contract residential treatment, the resource that is most strongly associated with clinical improvement, is the most expensive treatment component and, is quite difficult to obtain, in many cities.

In this report, as in our previous reports, we identify a need to enlarge and enhance the scope of services provided by the HCMI Veterans program through either internal expansion and/or through increased linkages with other VA and non-VA providers. Although the program has been implemented at 45 VA medical centers, specialized VA programs for homeless veterans have not yet been established in many large cities. In addition to the health care services, residential treatment and case management currently provided, the homeless mentally ill face a critical need for: 1) structured work restoration programs and supported employment, 2) long-term housing assistance and 3) facilitated access to public financial support.

A. New VA Efforts on Behalf of Homeless Veterans

During the past year the following actions have been taken, involving both HCMI program staff and other VA professionals, to address these issues.

Expansion of Sites

Two new HCMI programs were established this year, in Albany, New York and Dallas, Texas. These programs are both under way and data on their operation will be included in next year's report.

Compensated Work Therapy - Independent Living Housing. (CWT-ILH)

The two new sites, Dallas and Albany, were also selected to

implement the CWTR-ILH program. In this program homeless veterans live in community housing while they develop their work skills through participation in VA's Compensated Work Therapy program.

VA Comprehensive Homeless Centers

To maximize cooperation and coordination between various providers working with the homeless, a new organizational structure, the VA Comprehensive Homeless Center (VACHC), has been proposed and implemented at the Dallas VA medical center. Through the VA Comprehensive Homeless Center, HCMI clinicians, along with colleagues from related VA programs (the Domiciliary Care for Homeless Veterans [DCHV] program, Compensated Work Therapy, Psychiatry and Social Work Services, Readjustment Counselling Service, VA Regional Offices) and from non-VA agencies meet regularly to plan and coordinate their efforts. The exchange of information among VA and non-VA providers can in many instances yield a net gain in efficiency and total services delivered. A summary of activities and operating principals and participants from the Dallas VACHC in included in Appendix C.

Demonstration Program with Social Security Administration (SSA)

A specific example of such interagency collaboration, at the national level, is a planned VA-SSA demonstration program of outreach to veterans who may be eligible for social security benefits. Planning for this initiative began about 8 months ago and has resulted in a proposed demonstration program that would expedite social security claims reviews and improve the accuracy of the available medical evidence by fostering a fully collaborative relationship between HCMI (and DCHV) clinicians and SSA personnel. It is anticipated that, during the coming year, this effort will result in the implementation of VA-SSA demonstration projects at 5 HCMI sites, and in enhanced working relationships between SSA and VA at all HCMI program sites.

Collaboration with the Veterans Benefits Administration (VBA)

On June 1, 1991 the VBA implemented a new, expedited review process for benefit claims of homeless veterans. Under the new program adjudications decisions will be completed within 30 days of initiation. A monitoring system, managed jointly by the Veterans Assistance Service at VACO, and the evaluation team at the Northeast Program Evaluation Center, in West Haven, has been designed to assess the impact of this initiative and to improve the overall coordination of VBA and Veterans Health Administration (VHA) efforts across the country. It is hoped that this new initiative will improve the access of homeless veterans to benefits to which they are entitled.

Training and Education

In addition to these clinical and administrative initiatives a major national conference was held in Salt Lake City in August, 1990 that brought HCMI Clinicians together with professionals from the Domiciliary Care for Homeless Veterans program, Readjustment Counselling Service and the Veterans Assistance Service. Representatives from the Department of Housing and Urban Development (HUD) and the Interagency Council on the Homeless, as well as distinguished non-VA experts, also attended, allowing a full exchange of ideas on helping homeless veterans from a broad range of perspectives.

VA Supported Housing (VASH)

During the Fall of 1990 plans for a VA Supported Housing (VASH) program were drafted. Through this proposed program, veterans selected on the basis of need by VA homeless programs would be granted HUD Section 8 vouchers. These vouchers would facilitate engagement of difficult-to-reach homeless veterans suffering from severe substance abuse and psychiatric disorders. It is hoped that the VASH program, offering both supported housing services and intensive case management, would become a model for treating this especially challenging subgroup of the homeless. Discussions are continuing between VA and HUD concerning the development and implementation of this program.

B. Conclusion

Three years after its initiation, the HCMI Veterans program has a substantial record of accomplishment. With the support of its sponsoring VA medical centers, it has successfully established a network of programs that offer a broad spectrum of clinical services to thousands of homeless veterans each year. Evaluation data gathered and analyzed thus far show that the program yields demonstrable benefit for the veterans it assists, and that its work is being carefully and comprehensively monitored. The program has received national and local recognition as an innovative and effective participant in the larger national and local efforts to address the problems of the homeless mentally ill.

The continued success of the HCMI Veterans program will depend on its ability to grow and develop. At both the local and national levels there is a deep recognition of the substantial challenge faced in providing assistance to this multi-problem population and of the need to strengthen and enhance the services currently provided. Areas for enhancement of program effectiveness have been identified and inter-organizational linkages are being established to better meet the needs of the target population. It is fully to be expected that during the coming years the HCMI Veterans program will continue to provide services to thousands of men and women who served the nation in the past and who now have a special need for its help.

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APPENDICES

A. Data concerning Individual Program Sites: Tables A-2-1 to A-4-10.

B. Additional Studies of the HCMI Veterans Program

C. Descriptive Materials from the Dallas VA Comprehensive Homeless Service Center.

Appendix A:

Data On Individual HCMI Veterans Program Sites

TABLE A-2-1. TOTAL PERSONNEL EXPENDITURES, FTEE AND EXPENDITURE PER FTEE FOR FY 88-89 AND FY 89-90, WITH TOTAL CHANGE.

	FY 87/89			FY 89/90			CHANGE		
SITE	Total Personnel Dollars	Total FTEE	$/ FTEE	Total Personnel Dollars	Total# FTEE	$/ FTEE	Total Personnel Dollars	Total FTEE	$/ FTEE
ATLANTA	$68,044	2.2	$30,929	$83,280	2.2	$37,854	$15,236	0.0	$6,925
AUGUSTA	$70,757	2.2	$32,162	$68,210	2.2	$31,005	($2,547)	0.0	($1,158)
BATH	$40,490	2.2	$18,405	$37,288	2.2	$16,949	($3,202)	0.0	($1,455)
BOSTON	$61,928	2.2	$28,149	$74,808	2.2	$34,003	$12,880	0.0	$5,854
BUFFALO	$76,530	2.2	$34,786	$78,100	2.7	$28,926	$1,569	0.5	($5,861)
CHARLESTON	$56,067	2.2	$25,485	$78,800	2.2	$35,818	$22,732	0.0	$10,333
CHEYENNE *	$111,281	3.2	$34,775	$112,764	2.7	$41,764	$1,483	-0.5	$6,989
CINCINNATI	$69,936	2.2	$31,789	$110,883	2.6	$42,647	$40,947	0.4	$10,858
CLEVELAND	$84,335	2.2	$38,334	$87,422	2.2	$39,737	$3,087	0.0	$1,403
DAYTON *	$124,180	3.2	$38,806	$113,805	3.4	$33,972	($10,375)	0.1	($4,835)
DENVER	$72,689	2.2	$33,040	$93,003	2.2	$42,274	$20,315	0.0	$9,234
E. ORANGE	$57,109	2.2	$25,958	$64,607	2.2	$29,367	$7,499	0.0	$3,409
HAMPTON	$65,216	2.2	$29,644	$88,240	2.5	$36,016	$23,024	0.3	$6,373
HINES	$53,154	2.2	$24,161	$69,890	2.2	$31,768	$16,736	0.0	$7,607
HOUSTON	$84,937	2.2	$38,608	$103,758	2.7	$38,429	$18,821	0.5	($179)
INDIANAPOLIS *	$71,006	2.7	$26,299	$49,377	3.0	$16,738	($21,629)	0.3	($9,561)
KANSAS CITY	$78,443	2.2	$35,656	$94,388	2.2	$42,904	$15,945	0.0	$7,248
LITTLE ROCK	$80,860	2.2	$36,754	$96,354	2.7	$35,687	$15,494	0.5	($1,068)
LONG BEACH	$83,095	2.2	$37,770	$88,907	2.2	$40,412	$5,812	0.0	$2,642
LOS ANGELES	$77,900	2.2	$35,409	$61,610	2.6	$23,696	($16,291)	0.4	($11,713)
LOUISVILLE	$72,399	2.2	$32,909	$94,590	2.2	$42,995	$22,191	0.0	$10,087
MTN HOME *	$74,356	3	$24,785	$75,972	2.6	$29,220	$1,616	-0.4	$4,435
NASHVILLE	$51,149	2.2	$23,250	$50,097	2.2	$22,771	($1,052)	0.0	($478)
NEW ORLEANS *	$69,767	3.2	$21,802	$94,028	4.0	$23,507	$24,261	0.8	$1,705
NEW YORK *	$105,387	3.2	$32,933	$153,037	5.2	$29,430	$47,650	2.0	($3,503)
PERRY POINT	$77,420	2.2	$35,191	$76,698	2.2	$34,863	($722)	0.0	($328)
PHOENIX	$76,227	2.2	$34,648	$82,937	2.2	$37,699	$6,711	0.0	$3,050
PITTSBURGH	$75,376	2.2	$34,262	$98,188	2.2	$44,631	$22,812	0.0	$10,369
PORTLAND	$63,120	2.2	$28,691	$79,064	2.2	$35,938	$15,944	0.0	$7,247
ROSEBURG	$117,836	2.2	$53,562	$125,484	2.7	$46,476	$7,649	0.5	($7,086)
SALT LAKE CITY	$76,290	2.2	$34,677	$88,780	3.0	$30,095	$12,490	0.8	($4,582)
SAN ANTONIO	$76,279	2.2	$34,672	$86,005	2.2	$39,093	$9,726	0.0	$4,421
SAN DIEGO *	$86,602	2.7	$32,075	$115,590	3.0	$39,183	$28,988	0.3	$7,108
SAN FRANCISCO *	$94,214	3.2	$29,442	$107,202	3.7	$28,974	$12,989	0.5	($468)
ST LOUIS	$81,666	2.2	$37,121	$80,397	2.2	$36,544	($1,269)	0.0	($577)
SYRACUSE	$85,365	2.2	$38,802	$105,225	2.7	$38,972	$19,860	0.5	$170
TAMPA	$67,457	2.2	$30,662	$79,396	2.6	$30,537	$11,939	0.4	($125)
TUCSON *	$96,878	3.2	$30,274	$94,530	2.7	$35,011	($2,348)	-0.5	$4,737
TUSKEGEE	$70,361	2.2	$31,982	$79,580	2.2	$36,173	$9,219	0.0	$4,190
WALLA WALLA	$45,110	2.2	$20,505	$46,819	2.2	$21,281	$1,709	0.0	$777
WASHINGTON, DC	$118,702	4.2	$28,262	$115,679	4.1	$28,214	($3,023)	-0.1	($48)
WEST LA	$77,616	2.2	$35,235	$103,138	2.7	$38,199	$25,622	0.5	$2,965
WILKES BARRE	$65,195	2.2	$29,634	$69,374	2.2	$31,534	$4,178	0.0	$1,899
TOTAL	$3,312,630	104.4	$31,730	$3,757,305	112.1	$33,532	$444,675	7.7	$1,802
AVG PER SITE **	$77,038	2.4	$31,914	$87,379	2.6	$33,984	$10,341	0.2	$2,070

* = FTEE and expenditures are adjusted for increases occurring after October 1990.

* = Sites conducting outcome evaluation received additional funds and FTEE in FY 87/88.

Table A-2-2. Comparison of Residential Treatment Costs as Reported to VA Central Office and on the DRT May 1989 - May 1990 (FY 90).

SITE	Number of Episodes*	VACO Total	DRT Total	Difference (CO-Form 5)	% AGREEMENT
ATLANTA, GA	140	$158,604.99	$152,609.80	$5,995.19	96.2%
AUGUSTA, GA	95	$103,154.00	$92,682.00	$10,472.00	89.8%
BATH, NY	107	$199,709.49	$195,219.36	$4,490.13	97.8%
BOSTON, (OPC) MA	20	$103,740.00	$103,860.00	($120.00)	100.1%
BUFFALO, NY	11	$64,878.99	$57,355.71	$7,523.28	88.4%
CHARLESTON, SC	97	$204,642.00	$204,785.43	($143.43)	100.1%
CHEYENNE, WY	68	$183,301.00	$183,075.04	$225.96	99.9%
CINCINNATI, OH	111	$334,352.00	$315,537.48	$18,814.52	94.4%
CLEVELAND, OH	136	$244,146.40	$243,688.88	$457.52	99.8%
DAYTON, OH	63	$247,131.00	$235,423.44	$11,707.56	95.3%
DENVER, CO	249	$465,045.00	$466,635.96	($1,590.96)	100.3%
EAST ORANGE, NJ	45	$137,549.11	$105,359.86	$32,189.25	76.6%
HAMPTON, VA	47	$175,453.00	$161,812.07	$13,640.93	92.2%
HINES, IL	59	$130,655.39	$131,248.45	($593.06)	100.5%
HOUSTON, TX	85	$208,550.00	$209,200.30	($650.30)	100.3%
INDIANAPOLIS, IN	116	$200,377.00	$199,201.00	$1,176.00	99.4%
KANSAS CITY, MO	245	$433,243.48	$423,129.85	$10,113.63	97.7%
LITTLE ROCK, AR	114	$112,365.00	$115,074.10	($2,709.10)	102.4%
LONG BEACH, CA	63	$159,800.00	$160,600.23	($800.23)	100.5%
LOS ANGELES, CA	23	$111,800.00	$115,000.00	($3,200.00)	102.9%
LOUISVILLE, KY	163	$327,822.22	$299,740.70	$28,081.52	91.4%
MTN. HOME, TN	103	$167,742.00	$167,561.43	$180.57	99.9%
NASHVILLE, TN	10	$20,240.00	$20,360.00	($120.00)	100.6%
NEW ORLEANS, LA	203	$604,401.00	$566,430.90	$37,970.10	93.7%
NEW YORK, NY	26	$153,878.99	$139,983.00	$13,895.99	91.0%
PERRY POINT, MD	200	$294,804.31	$291,840.00	$2,964.31	99.0%
PHOENIX, AZ	56	$393,540.12	$340,208.96	$53,331.16	86.4%
PITTSBURGH, PA	99	$306,110.00	$298,519.65	$7,590.35	97.5%
PORTLAND, OR	49	$125,583.98	$107,871.54	$17,712.44	85.9%
ROSEBURG, OR	60	$97,983.00	$104,538.00	($6,555.00)	106.7%
SALT LK. CITY, U	24	$24,560.00	$23,160.00	$1,400.00	94.3%
SAN ANTONIO, TX	79	$187,545.00	$191,074.14	($3,529.14)	101.9%
SAN DIEGO, CA	162	$287,830.35	$266,212.98	$21,617.37	92.5%
SAN FRANCISCO, C	67	$326,304.00	$318,854.34	$7,449.66	97.7%
ST. LOUIS, MO	197	$436,011.56	$412,818.83	$23,192.73	94.7%
SYRACUSE, NY	27	$48,213.00	$47,428.74	$784.26	98.4%
TAMPA, FL	148	$179,834.41	$173,346.48	$6,487.93	96.4%
TUCSON, AZ	146	$194,364.00	$189,737.22	$4,626.78	97.6%
TUSKEGEE, AL	24	$97,400.00	$88,999.92	$8,400.08	91.4%
WALLA WALLA, WA	25	$51,217.29	$51,432.94	($215.65)	100.4%
WASHINGTON, D.C.	92	$236,651.00	$219,557.56	$17,093.44	92.8%
WEST LA, CA	32	$145,935.24	$145,591.04	$344.20	99.8%
WILKES-BARRE, PA	132	$172,309.16	$171,676.56	$632.60	99.6%
TOTAL	4019	$8,858,778.48	$8,508,443.89	$350,334.59	96.0%

*Includes partial costs for episodes beginning before May 89 or ending after May 1990.

TABLE A-2-3. ANNUALIZED PROGRAM EXPENDITURES, OCTOBER 1987-MAY 1989, ANNUAL PROGRAM EXPENDITURES MAY 1989-APRIL 1990 AND TOTAL CHANGE.

SITE	OCTOBER 1987-MAY 1989				MAY 1989-APRIL 1990				CHANGE			
	RESIDENTIAL TREATMENT	FCP 809 (ALL OTHER)	FCP 808 (PERSONNEL)	TOTAL (808+809)	RESIDENTIAL TREATMENT	FCP 809 (ALL OTHER)	FCP 808 (PERSONNEL)	TOTAL (808+809)	RESIDENTIAL TREATMENT	FCP 809 (ALL OTHER)	FCP 808 (PERSONNEL)	TOTAL (808+809)
ATLANTA	$140,296	$137,491	$68,044	$205,535	$158,605	$160,768	$83,280	$244,048	$18,309	$23,277	$15,236	$38,513
AUGUSTA	$74,883	$77,692	$70,757	$148,449	$103,154	$110,719	$68,210	$178,930	$28,271	$33,027	($2,547)	$30,481
BATH	$128,725	$139,825	$40,490	$180,315	$199,709	$208,814	$37,288	$246,102	$70,984	$68,989	($3,202)	$65,787
BOSTON	$84,480	$87,883	$61,928	$149,811	$103,740	$106,008	$74,808	$180,815	$19,260	$18,125	$12,880	$31,004
BUFFALO	$52,477	$56,300	$76,530	$132,830	$64,878	$68,877	$78,100	$146,977	$12,401	$12,578	$1,569	$14,147
CHARLESTOWN	$190,092	$192,468	$56,067	$248,536	$204,642	$205,857	$78,800	$284,656	$14,550	$13,388	$22,732	$36,120
CHEYENNE	$195,503	$201,717	$111,781	$312,998	$183,301	$187,588	$112,764	$300,352	($12,202)	($14,129)	$1,483	($12,646)
CINCINNATI	$297,898	$305,255	$69,936	$375,191	$334,352	$341,862	$110,883	$452,746	$36,464	$36,608	$40,947	$77,555
CLEVELAND	$178,743	$180,619	$84,335	$264,954	$244,146	$244,368	$87,422	$331,790	$65,403	$63,749	$3,087	$66,837
DAYTON	$281,193	$348,033	$124,180	$472,212	$247,131	$258,008	$113,805	$371,813	($34,062)	($90,025)	($10,375)	($100,400)
DENVER	$461,303	$463,860	$72,689	$536,548	$465,045	$468,268	$93,003	$561,271	$3,742	$4,408	$20,315	$24,723
E. ORANGE	$138,594	$144,045	$57,109	$201,153	$137,549	$147,533	$64,607	$212,140	($1,045)	$3,488	$7,499	$10,987
HAMPTON	$145,296	$153,853	$65,216	$219,070	$175,453	$185,811	$88,240	$274,051	$30,157	$31,958	$23,024	$54,982
HINES	$179,894	$185,129	$53,154	$238,283	$130,655	$136,015	$69,890	$205,905	($49,239)	($49,114)	$16,736	($32,379)
HOUSTON	$224,055	$227,440	$84,937	$312,378	$208,550	$212,757	$103,758	$316,515	($15,505)	($14,683)	$18,821	$4,138
INDIANAPOLIS	$241,216	$247,385	$71,006	$318,391	$200,377	$206,825	$49,377	$256,202	($40,839)	($40,560)	($21,629)	($62,189)
KANSAS CITY	$475,981	$476,867	$78,443	$555,110	$433,243	$433,928	$94,388	$528,316	($42,738)	($42,739)	$15,945	($26,794)
LITTLE ROCK	$133,264	$139,495	$80,860	$220,354	$117,365	$121,350	$96,354	$217,704	($20,899)	($18,144)	$15,494	($2,650)
LONG BEACH	$88,410	$92,283	$83,095	$175,378	$159,800	$162,400	$88,907	$251,307	$71,390	$70,117	$5,812	$75,929
LOS ANGELES	$130,344	$136,659	$77,900	$214,559	$111,800	$113,508	$61,610	$175,118	($18,544)	($23,150)	($16,291)	($39,441)
LOUISVILLE	$265,930	$276,199	$72,399	$348,598	$327,822	$348,427	$94,590	$443,017	$61,892	$72,228	$22,191	$94,419
MIN HOMB	$184,805	$185,976	$74,356	$260,331	$167,747	$176,483	$75,972	$252,455	($17,063)	($9,492)	$1,616	($7,876)
NASHVILLE	$20,136	$27,934	$51,149	$79,084	$20,240	$24,094	$50,097	$74,101	$104	($3,930)	($1,052)	($4,982)
NEW ORLEANS	$601,203	$614,622	$69,767	$684,389	$604,401	$617,397	$94,028	$711,425	$3,198	$2,775	$24,261	$27,036
NEW YORK	$95,476	$102,104	$105,387	$207,490	$153,878	$162,554	$153,037	$315,591	$58,402	$60,450	$47,650	$108,100
PERRY POINT	$303,989	$323,690	$77,420	$399,110	$294,804	$305,721	$76,698	$382,419	($9,185)	($15,969)	($722)	($16,691)
PHOENIX	$257,126	$259,034	$76,227	$335,260	$393,540	$398,142	$82,937	$481,085	$136,414	$139,114	$6,711	$145,824

TABLE A-2-3 (CONT'D). ANNUALIZED PROGRAM EXPENDITURES, OCTOBER 1987-MAY 1989, ANNUAL PROGRAM EXPENDITURES MAY 1989-APRIL 1990 AND TOTAL CHANGE.

	OCTOBER 1987-MAY 19				MAY 1989-APRIL 1990				CHANGE			
SITE	RESIDENTIAL TREATMENT	FCP 809 (ALL OTHER)	FCP 808 (PERSONNEL)	TOTAL (808+809)	RESIDENTIAL TREATMENT	FCP 809 (ALL OTHER)	FCP 808 (PERSONNEL)	TOTAL (808+809)	RESIDENTIAL TREATMENT	FCP 809 (ALL OTHER)	FCP 808 (PERSONNEL)	TOTAL (808+809)
PITTSBURGH	$336,925	$326,704	$75,376	$402,079	$306,110	$317,489	$98,188	$410,677	($30,815)	($14,715)	$22,812	$8,598
PORTLAND	$89,978	$101,404	$61,120	$164,523	$125,583	$135,319	$79,064	$214,383	$35,605	$33,915	$15,944	$49,859
ROSEBURG	$111,552	$126,876	$117,836	$244,712	$97,983	$110,649	$125,484	$236,134	($13,569)	($16,227)	$7,649	($8,578)
SAN ANTONIO	$188,720	$190,028	$76,290	$266,318	$187,545	$187,545	$86,005	$273,550	($1,175)	($2,483)	$9,715	$7,232
SAN DIEGO	$412,156	$432,363	$76,279	$508,643	$287,830	$306,472	$115,590	$422,062	($124,326)	($125,891)	$39,311	($86,581)
SAN FRANCISCO	$225,898	$190,028	$86,602	$276,629	$326,304	$332,487	$107,202	$439,690	$100,406	$142,460	$20,601	$163,060
SALT LAKE CITY	$30,611	$67,091	$94,214	$161,305	$24,560	$30,314	$88,780	$119,094	($6,051)	($36,778)	($5,433)	($42,211)
ST. LOUIS	$363,058	$496,173	$81,666	$577,839	$436,011	$460,141	$80,397	$540,538	$72,953	($36,032)	($1,269)	($37,301)
SYRACUSE	$47,669	$51,213	$85,365	$136,578	$48,213	$52,952	$105,225	$158,177	$544	$1,739	$19,860	$21,599
TAMPA	$157,294	$161,287	$67,457	$228,744	$179,834	$182,679	$79,396	$262,075	$22,540	$21,392	$11,939	$33,331
TUCSON	$147,260	$150,181	$96,878	$247,058	$194,364	$197,399	$94,530	$291,929	$47,104	$47,218	($2,348)	$44,871
TUSKEGEE	$52,650	$71,862	$70,361	$142,223	$97,400	$128,742	$79,580	$207,822	$44,750	$56,380	$9,219	$65,599
WALLA WALLA	$40,701	$54,599	$45,110	$99,709	$51,217	$67,409	$46,819	$114,228	$10,514	$12,810	$1,709	$14,519
WASHINGTON, DC	$240,732	$252,030	$118,702	$370,731	$236,651	$247,016	$115,679	$362,695	($4,081)	($5,013)	($3,023)	($8,036)
W. LOS ANGELES	$128,244	$133,658	$77,516	$211,174	$145,935	$150,685	$103,138	$253,823	$17,691	$17,027	$25,622	$42,649
WILKES BARRE	$142,055	$160,604	$65,195	$225,800	$172,309	$179,173	$69,374	$248,547	$30,254	$18,569	$4,178	$22,747
TOTAL	$8,286,806	$8,747,757	$3,317,630	$12,066,387	$8,858,771	$9,194,972	$3,757,305	$12,952,276	$571,965	$447,215	$444,675	$891,889
AVERAGE/SITE	$192,716	$203,436	$77,038	$280,474	$206,018	$213,837	$87,379	$301,216	$13,302	$10,400	$10,341	$20,742
MONTHLY/SITE	$16,060	$16,953	$6,420	$23,373	$17,168	$17,820	$7,282	$25,101	$1,108	$867	$862	$1,728

TABLE A-3-1 SITE CHARACTERISTICS, NUMBER OF NEW INTAKES AND AVERAGE AGE, FY 87/89 AND FY 89/90.

SITE	ANNUAL 87/89	ANNUAL 89/90*	CHANGE 87/9-89/90	PCT. CHNGE. 87/9-89/90#	AVERAGE AGE 87/89	AVERAGE AGE 89/90	CHANGE 87/9-89/90
ATLANTA	396	329	-67	-16.9%	38.7	37.8	-0.9
AUGUSTA	81	55 *	-26	-31.7%	42.0	38.5	-3.5
BATH	104	218	114	109.6%	48.5	41.7	-6.8
BOSTON	169	337	169	100.0%	45.2	44.6	-0.6
BUFFALO	145	206	61	42.1%	44.6	43.5	-1.1
CHARLESTON	166	190	24	14.5%	41.8	41.4	-0.4
CHEYENNE	78	93	16	20.0%	41.5	41.5	0.1
CINCINNATI	150	157	7	4.7%	44.8	43.9	-0.8
CLEVELAND	338	241	-97	-28.7%	41.6	39.4	-2.2
DAYTON	340	145	-195	-57.3%#	41.7	37.4	-4.4
DENVER	296	311	15	5.1%	40.8	40.4	-0.4
E. ORANGE	150	77	-73	-48.5%	44.2	41.0	-3.1
HAMPTON	420	312	-108	-25.7%	41.8	39.6	-2.2
HINES (CHIC.)	137	216	80	58.2%	42.0	42.7	0.7
HOUSTON	192	172	-20	-10.2%	40.9	39.9	-1.0
INDIANAPOLIS	160	167	8	4.7%	43.4	40.9	-2.5
KANSAS CITY	196	157	-39	-19.9%	39.4	38.8	-0.6
LITTLE ROCK	211	249	38	18.0%	43.2	41.8	-1.3
LONG BEACH	188	111	-77	-40.8%	45.4	45.5	0.1
LOS ANGELES	296	168	-128	-43.2%	39.9	39.3	-0.7
LOUISVILLE	252	174	-78	-30.8%	44.4	43.5	-0.9
MTN HOME	157	148	-9	-5.7%	44.4	47.2	2.9
NASHVILLE	194	130	-64	-32.8%	42.8	44.0	1.2
NEW ORLEANS	236	256	20	8.5%	43.9	42.0	-1.9
NEW YORK	378	231	-147	-38.8%	42.4	44.2	1.8
PERRY POINT	188	158	-30	-15.7%	43.2	40.9	-2.3
PHOENIX	94	97	4	3.7%	40.7	42.0	1.3
PITTSBURGH	169	81	-88	-51.9%*	42.9	42.2	-0.8
PORTLAND	106	60 *	-46	-43.4%	40.0	40.2	0.2
ROSEBURG	267	281	14	5.2%	45.3	45.8	0.5
SALT LAKE CITY	341	228	-113	-33.0%	43.4	44.5	1.2
SAN ANTONIO	122	97	-25	-20.2%	40.3	41.4	1.2
SAN DIEGO	134	294	161	120.2%	38.5	40.5	2.0
SAN FRANCISCO	356	273	-83	-23.3%	40.5	40.7	0.2
ST LOUIS	364	332	-32	-8.7%	40.5	39.3	-1.2
SYRACUSE	132	143	12	8.7%	45.2	43.5	-1.7
TAMPA	330	261	-69	-20.9%	41.4	44.0	2.6
TUCSON	547	249	-298	-54.5%*	43.1	43.4	0.3
TUSKEGEE	89	141	53	59.3%	42.1	42.2	0.1
WALLA WALLA	158	169	12	7.3%	45.4	44.1	-1.3
WASHINGTON, DC	374	294	-80	-21.4%	44.6	41.7	-2.9
WEST LOS ANGELES	315	329	14	4.4%	40.2	41.2	1.1
WILKES BARRE	370	286	-84	-22.7%	45.2	44.6	-0.6
TOTAL	9875	8623	-1252	-12.7%			
SITE AVERAGE	230	201	-29	-3.5%	42.6	41.9	-0.7
STANDARD DEVIATION	111	81	85		2.1	2.2	1.8

* = Value is 1.68 standard deviations below the mean of all sites.
# = -50%.

TABLE A-3.2 ETHNIC COMPOSITION IN FY 87/89 AND FY 89/90, AND CHANGE FY 87/89 - FY 89/90, BY US CENSUS REGION.

SITE	INTAKES: 1987/1989				INTAKES: 1989/1990				CHANGE: 1987/1989-1989/1990			
	WHITE	BLACK	HISPANIC	OTHER	WHITE	BLACK	HISPANIC	OTHER	WHITE	BLACK	HISPANIC	OTHER
NORTHEAST												
BATH	77.4%	21.2%	1.0%	0.5%	52.3%	43.6%	3.7%	0.5%	-25.1%	22.5%	2.7%	0.0%
BOSTON	69.7%	22.3%	6.8%	1.2%	65.0%	31.5%	3.0%	0.6%	-4.7%	9.2%	-3.8%	-0.6%
BUFFALO	57.9%	35.4%	5.6%	1.1%	47.1%	47.6%	2.9%	2.4%	-10.8%	12.2%	-2.7%	1.3%
E. ORANGE	32.0%	63.0%	5.1%	0.0%	33.3%	58.7%	8.0%	0.0%	1.3%	-4.3%	3.0%	0.0%
NEW YORK	18.8%	66.9%	13.5%	0.8%	19.0%	69.4%	11.2%	0.4%	0.2%	2.5%	-2.3%	-0.4%
SYRACUSE	75.3%	19.4%	2.3%	3.0%	72.3%	25.5%	0.7%	1.4%	-3.0%	6.1%	-1.6%	-1.6%
PITTSBURGH	63.3%	34.9%	1.5%	0.3%	76.2%	22.5%	0.0%	1.3%	12.9%	-12.4%	-1.5%	1.0%
WILKES BARRE	86.0%	11.0%	2.6%	0.4%	83.7%	12.7%	2.8%	0.7%	-2.3%	1.7%	0.2%	0.3%
AVERAGE: NORTHEAST	60.1%	34.3%	4.8%	0.9%	56.1%	38.9%	4.0%	0.9%	-3.9%	4.7%	-0.7%	0.0%
1980 CENSUS (WETS)	87.7%	9.2%	3.1%	N/A	87.7%	9.2%	3.1%	N/A				
MID WEST												
CINCINNATI	56.4%	40.3%	3.0%	0.3%	45.8%	52.3%	0.6%	1.3%	-10.6%	12.0%	-2.4%	1.0%
CLEVELAND	44.7%	52.5%	2.5%	0.3%	31.7%	66.7%	1.7%	0.0%	-13.0%	14.2%	-0.8%	-0.3%
DAYTON	58.5%	36.7%	4.1%	1.7%	44.1%	54.5%	0.7%	0.7%	-14.4%	18.3%	-3.4%	-0.5%
HINES (CHIC.)	45.0%	49.8%	4.1%	1.1%	36.0%	62.6%	1.4%	0.0%	-9.0%	12.8%	-2.7%	-1.1%
INDIANAPOLIS	64.0%	32.9%	2.5%	0.6%	47.2%	50.9%	1.8%	0.0%	-16.8%	18.0%	-0.7%	-0.6%
KANSAS CITY	53.7%	40.4%	4.9%	1.0%	34.0%	65.4%	0.6%	0.0%	-19.7%	25.0%	-4.3%	-1.0%
ST LOUIS	44.8%	52.8%	1.9%	0.6%	32.2%	64.4%	3.0%	0.3%	-12.6%	11.6%	1.1%	-0.3%
AVERAGE: MID-WEST	52.4%	43.6%	3.3%	0.7%	38.7%	59.5%	1.4%	0.3%	-13.7%	16.0%	-1.9%	-0.4%
1980 CENSUS (WETS)	91.5%	7.0%	1.4%	N/A	91.5%	7.0%	1.4%	N/A				
SOUTH												
ATLANTA	23.4%	74.8%	1.7%	0.2%	16.0%	82.5%	1.5%	0.0%	-7.4%	7.7%	-0.2%	-0.2%
AUGUSTA	51.6%	46.0%	2.5%	0.0%	27.3%	72.7%	0.0%	0.0%	-24.2%	26.7%	-2.5%	0.0%
CHARLESTON	60.8%	38.9%	0.3%	0.0%	67.2%	32.3%	0.0%	0.5%	6.4%	-6.6%	-0.3%	0.5%
HAMPTON	30.7%	55.8%	12.8%	0.7%	35.3%	63.8%	0.6%	0.3%	4.6%	8.0%	-12.2%	-0.4%
HOUSTON	46.9%	42.9%	8.4%	1.8%	43.6%	52.3%	3.5%	0.6%	-3.3%	9.4%	-4.9%	-1.2%
LITTLE ROCK	66.0%	30.7%	3.4%	0.0%	56.7%	41.6%	0.8%	0.8%	-9.3%	10.9%	-2.6%	0.8%
LOUISVILLE	75.5%	21.6%	2.2%	0.8%	75.3%	22.4%	0.6%	1.7%	-0.2%	0.8%	-1.6%	0.9%
MIB HOME	81.9%	12.7%	5.1%	0.3%	91.9%	7.4%	0.7%	0.0%	10.1%	-5.3%	-4.4%	-0.3%

TABLE A-3-2 (CONT'D). ETHNIC COMPOSITION IN FY 87/89 AND FY 89/90, AND CHANGE FY 87/89 - FY 89/90, BY US CENSUS REGION.

	INTAKES: 1987/1989				INTAKES: 1989/1990				CHANGE: 1987/1989-1989/1990			
SITE	WHITE	BLACK	HISPANIC	OTHER	WHITE	BLACK	HISPANIC	OTHER	WHITE	BLACK	HISPANIC	OTHER
SOUTH (CONT'D)												
NASHVILLE	74.4%	24.9%	0.3%	0.5%	82.8%	17.2%	0.0%	0.0%	8.5%	-7.7%	-0.3%	-0.5%
NEW ORLEANS	53.8%	45.6%	0.6%	0.0%	45.5%	53.0%	0.4%	0.4%	-8.3%	7.5%	-0.2%	0.4%
PERRY POINT	53.4%	45.3%	1.1%	0.3%	57.5%	40.6%	1.3%	0.6%	4.1%	-4.7%	0.2%	0.3%
SAN ANTONIO	61.3%	18.1%	18.9%	1.6%	56.8%	10.5%	28.4%	4.2%	-4.5%	-7.6%	9.5%	2.6%
TAMPA	62.1%	33.3%	4.4%	0.2%	65.9%	31.8%	1.5%	0.8%	3.8%	-1.5%	-2.9%	0.6%
TUSKEGEE	53.4%	44.3%	0.6%	1.7%	45.7%	52.9%	0.7%	0.7%	-7.7%	8.6%	0.1%	-1.0%
WASHINGTON, DC	19.1%	72.4%	7.8%	0.8%	14.7%	83.2%	2.1%	0.0%	-4.4%	10.9%	-5.7%	-0.8%
AVERAGE: SOUTH	54.3%	40.5%	4.7%	0.6%	52.1%	44.3%	2.8%	0.7%	-2.1%	3.8%	-1.9%	0.1%
1980 CENSUS (VETS)	82.5%	13.0%	4.5%	N/A	82.5%	13.0%	4.5%	N/A				
WEST												
CHEYENNE	82.6%	4.5%	7.8%	5.2%	87.0%	4.3%	7.6%	1.1%	4.4%	-0.2%	-0.2%	-4.1%
DENVER	59.7%	24.1%	11.5%	4.7%	57.7%	30.1%	9.3%	2.9%	-2.0%	6.0%	-2.2%	-1.8%
LONG BEACH	69.2%	20.9%	8.9%	1.1%	60.6%	23.9%	11.9%	3.7%	-8.6%	3.0%	3.1%	2.6%
LOS ANGELES	30.7%	58.5%	8.1%	2.7%	10.8%	85.6%	3.6%	0.0%	-19.9%	27.1%	-4.5%	-2.7%
PHOENIX	73.3%	15.5%	8.0%	3.2%	74.0%	16.7%	6.2%	3.1%	0.7%	1.2%	-1.8%	-0.1%
PORTLAND	81.0%	11.4%	4.3%	3.3%	88.3%	10.0%	0.0%	1.7%	7.3%	-1.4%	-4.3%	-1.6%
ROSEBURG	88.7%	3.4%	3.8%	4.2%	95.0%	0.7%	2.1%	2.1%	6.3%	-2.7%	-1.7%	-2.1%
SALT LAKE CITY	82.6%	5.5%	8.3%	3.7%	84.6%	6.6%	6.1%	2.6%	2.0%	1.2%	-2.2%	-1.1%
SAN FRANCISCO	45.9%	43.8%	7.4%	2.8%	45.1%	43.6%	8.6%	2.6%	-0.8%	-0.2%	1.2%	-0.2%
TUCSON	82.2%	8.7%	7.1%	2.0%	83.1%	6.8%	8.4%	1.6%	0.9%	-1.9%	1.3%	-0.4%
WALLA WALLA	83.6%	4.5%	5.5%	6.4%	84.6%	7.7%	1.2%	6.5%	1.0%	3.2%	-4.3%	0.1%
WEST LOS ANGELES	62.4%	30.0%	5.6%	2.1%	59.6%	35.0%	4.6%	0.9%	-2.8%	5.0%	-1.0%	-1.2%
AVERAGE: WEST	70.2%	19.2%	7.2%	3.4%	69.2%	22.6%	5.8%	2.4%	-1.0%	3.4%	-1.4%	-1.0%
1980 CENSUS (VETS)	85.7%	5.5%	8.8%	N/A	85.7%	5.5%	8.8%	N/A				
ALL REGIONS	54.4%	32.2%	4.8%	1.4%	50.7%	37.8%	3.4%	1.1%	-0.6%	3.5%	-1.9%	-1.0%
1980 CENSUS (VETS)	86.2%	9.4%	4.4%	N/A	86.2%	9.4%	4.4%	N/A				

TABLE A.3.3. CURRENT RESIDENCE, EMPLOYMENT, AND INCOME, BY SITE, FY 89/90.

SITE	RESIDENCE AT TIME OF INTAKE: Shelter/ No Res.	Own Apt.*	With Fam* or Frnds	Insti-tution*	USUAL EMPLOYMENT: PREVIOUS 3 YEARS: Full Time	Part Time	Retired	Unemployed	Other	INCOME: PAST 30 DAYS: NONE	$1-$499	$500-$1,000	>$1,000*
ATLANTA, GA	84.0%	2.0%	12.0%	1.2%	31.5%	43.2%	4.0%	20.7%	0.6%	22.5%	70.4%	5.6%	1.5%
AUGUSTA, GA	76.8%	3.6%	19.6%*	0.0%	67.3%	18.2%	7.3%	5.5%	1.8%	50.9%	36.4%	7.3%	5.5%*
BATH, NY	53.2%	11.0%*	27.1%*	8.7%	31.0%	40.3%	14.4%	13.0%	1.4%	28.9%	57.3%	12.4%	1.4%
BOSTON, (DPC) MA	82.0%	3.8%	6.8%	7.4%	33.1%	23.7%	24.9%	17.2%	1.2%	7.4%	70.2%	19.0%	3.3%
BUFFALO, NY	74.1%	6.7%	16.3%	2.9%	27.1%	14.0%	37.7%	20.8%	0.5%	27.1%	54.1%	15.9%	2.9%
CHARLESTON, SC	76.8%	0.0%	16.9%	6.3%	18.9%	37.4%	2.6%	41.1%	0.0%	69.3%	28.0%	2.6%	0.0%
CHEYENNE, WY	89.2%	3.2%	3.2%	4.3%	27.8%	27.8%	12.2%	30.0%	2.2%	15.2%	71.7%	12.0%	1.1%
CINCINNATI, OH	68.4%	12.0%*	18.4%	1.3%	34.2%	19.0%	15.2%	31.0%	0.6%	32.3%	54.4%	12.7%	0.6%
CLEVELAND, OH	75.7%	3.3%	16.3%	4.6%	29.5%	28.2%	17.4%	22.0%	2.9%	25.1%	57.3%	13.8%	3.8%*
DAYTON, OH	65.7%	2.1%	18.5%	13.7%	37.9%	31.7%	1.4%	25.5%	3.4%	68.7%	26.4%	4.2%	0.7%
DENVER, CO	63.5%	3.1%	11.0%	22.3%*	63.2%	26.7%	4.1%	5.4%	0.6%	53.6%	40.8%	0.5%	0.6%
EAST ORANGE, NJ	78.0%	0.0%	5.2%	16.9%	18.4%	27.6%	30.3%	23.7%	0.0%	38.2%	44.7%	15.8%	1.3%
HAMPTON, VA	59.3%	12.7%*	24.4%*	3.6%	31.4%	26.0%	15.4%	24.7%	2.6%	40.1%	48.4%	10.6%	1.0%
HINES, IL	68.1%	3.7%	4.6%	23.6%*	35.2%	21.6%	11.7%	31.5%	0.0%	15.9%	71.0%	12.6%	0.5%
HOUSTON, TX	76.8%	4.1%	14.0%	5.2%	11.6%	18.0%	12.8%	57.6%	0.0%	41.3%	54.1%	4.7%	0.0%
INDIANAPOLIS, IN	73.0%	3.6%	17.4%	6.0%	41.7%	27.4%	11.9%	18.5%	0.6%	37.0%	58.8%	4.2%	0.0%
KANSAS CITY, MO	51.6%	3.2%	23.6%*	21.7%*	73.1%	22.4%	0.6%	3.8%	0.0%	41.4%	55.4%	3.2%	0.0%
LITTLE ROCK, AR	59.8%	5.3%	17.1%	17.9%*	40.0%	27.8%	12.2%	18.4%	1.6%	27.5%	57.9%	12.1%	2.4%
LONG BEACH, CA	83.6%	4.5%	11.8%	0.0%	24.3%	27.9%	26.1%	21.6%	0.0%	29.1%	56.4%	13.6%	0.9%
LOS ANGELES, CA	94.0%	2.4%	2.4%	1.2%	28.6%	10.7%	6.5%	54.2%	0.0%	31.7%	47.3%	15.6%	5.4%*
LOUISVILLE, KY	89.1%	2.3%	8.0%	0.6%	25.3%	33.9%	13.2%	26.4%	1.1%	35.5%	58.1%	5.8%	0.6%
MTN. HOME, TN	83.1%	4.1%	8.8%	4.1%	24.3%	30.4%	26.4%	17.6%	1.4%	18.9%	59.5%	20.9%	0.7%
NASHVILLE, TN	87.6%	0.0%	8.5%	3.9%	31.8%	38.8%	19.4%	10.1%	0.0%	10.0%	73.1%	12.3%	4.6%*
NEW ORLEANS, LA	91.8%	1.6%	4.7%	1.9%	35.0%	37.4%	5.8%	20.6%	1.2%	37.0%	58.0%	3.9%	1.2%
NEW YORK, NY	83.5%	3.9%	12.6%	0.0%	21.0%	17.8%	25.2%	33.0%	0.9%	33.8%	40.8%	20.6%	4.8%*
PERRY POINT, MD	76.7%	0.6%	1.3%	21.4%*	54.7%	21.4%	8.8%	14.5%	0.6%	50.9%	40.9%	5.7%	2.5%
PHOENIX, AZ	62.5%	0.0%	10.4%	27.1%*	34.0%	18.6%	17.5%	28.9%	1.0%	33.0%	54.6%	12.4%	0.0%

TABLE A-3-3 (CONT'D). CURRENT RESIDENCE, EMPLOYMENT, AND INCOME, BY SITE, FY 89/90.

SITE	RESIDENCE AT TIME OF INTAKE: Shelter/ No Res.	Own Apt.*	With fam* or frnds	insti-tution*	USUAL EMPLOYMENT: PREVIOUS 3 YEARS: Full Time	Part Time	Retired	Unemp-loyed	Other	INCOME: PAST 30 DAYS: NONE	$1-$499	$500-$1,000	>$1,000*
PITTSBURGH, PA	39.5%	8.6%*	4.9%	46.9%*	20.3%	22.8%	26.6%	29.1%	1.3%	35.8%	54.3%	6.2%	3.7%*
PORTLAND, OR	81.7%	5.0%	3.3%	10.0%	36.7%	46.7%	3.3%	13.3%	0.0%	16.4%	75.4%	6.6%	1.6%
ROSEBURG, OR	86.4%	2.8%	4.6%	5.3%	3.5%	22.3%	19.9%	53.9%	0.4%	49.3%	42.2%	8.5%	0.0%
SALT LK. CITY, UT	89.5%	3.5%	1.8%	5.3%	20.6%	29.8%	11.4%	37.7%	0.4%	38.6%	52.2%	8.8%	0.4%
SAN ANTONIO, TX	71.4%	0.0%	28.6%*	0.0%	29.3%	46.5%	3.0%	21.2%	0.0%	29.3%	68.7%	2.0%	0.0%
SAN DIEGO, CA	82.6%	7.5%*	6.1%	3.8%	35.6%	24.6%	9.3%	28.7%	1.7%	30.9%	53.6%	12.4%	3.1%
SAN FRANCISCO, CA	74.3%	8.1%*	8.5%	9.2%	28.1%	22.6%	14.4%	34.1%	0.7%	25.9%	56.4%	16.2%	1.5%
ST. LOUIS, MO	73.8%	3.9%	21.1%*	1.7%	51.5%	24.2%	9.1%	14.5%	0.6%	40.5%	47.7%	8.5%	3.3%
SYRACUSE, NY	61.5%	9.8%*	14.0%	14.7%	30.7%	29.3%	26.4%	12.9%	0.7%	23.8%	43.4%	30.1%	2.8%
TAMPA, FL	86.1%	7.7%*	5.8%	0.4%	13.5%	34.4%	22.4%	29.0%	0.8%	34.3%	54.3%	10.6%	0.8%
TUCSON, AZ	83.7%	4.0%	4.8%	7.4%	15.3%	24.5%	23.3%	35.7%	1.2%	36.6%	50.4%	11.8%	1.2%
TUSKEGEE, AL	85.1%	0.7%	12.1%	2.1%	36.2%	30.5%	4.3%	29.1%	0.0%	47.5%	41.8%	8.5%	2.1%
WALLA WALLA, WA	82.2%	1.2%	4.1%	12.4%	17.3%	40.5%	19.6%	22.0%	0.6%	17.3%	70.2%	10.7%	1.8%
WASHINGTON, D.C.	94.9%	1.4%	3.4%	0.3%	43.2%	26.2%	13.6%	16.3%	0.7%	38.4%	46.6%	10.6%	4.5%*
WEST LA, CA	92.2%	4.5%	3.0%	0.3%	16.0%	13.0%	23.8%	47.3%	0.0%	16.6%	55.7%	24.6%	3.1%
WILKES-BARRE, PA	73.3%	5.3%	20.4%*	1.1%	37.1%	20.6%	24.5%	17.8%	0.0%	11.9%	65.7%	16.1%	6.3%*
AVERAGE	76.5%	4.1%	11.3%	8.0%	31.8%	27.4%	14.9%	25.1%	0.8%	32.9%	54.1%	11.0%	1.9%
SID	12.3%	3.2%	7.4%	9.6%	14.1%	8.5%	8.9%	12.4%	0.8%	13.8%	11.5%	6.1%	1.7%

* - Value is more than 1.68 standard deviations above the mean for all sites.

TABLE A-3-4. TIME HOMELESS AT INTAKE, FY 87/89 AND FY 89/90.

SITE	TIME HOMELESS: 1987/1989			TIME HOMELESS: 1989/1990			CHANGE IN TIME HOMELESS		
	< 1 MO.	2-12 MOS	> 12 MOS	< 1 MO.*	2-12 MOS	> 12 MOS	< 1 MO.*	2-12 MOS	> 12 MOS
ATLANTA	18.6%	51.7%	28.9%	10.2%	66.0%	23.8%	-8.4%	14.3%	-5.1%
AUGUSTA	29.6%	46.5%	21.4%	35.2%	59.3%	5.6%	5.6%	12.8%	-15.8%
BATH	31.4%	42.0%	25.1%	30.1%	52.0%	17.9%	-1.3%	10.0%	-7.3%
BOSTON	19.1%	37.8%	42.3%	20.1%	32.8%	46.7%	1.1%	-5.0%	4.4%
BUFFALO	45.4%	27.8%	20.8%	30.4%	30.9%	37.7%	-15.0%	3.1%	16.9%
CHARLESTON	30.9%	47.6%	21.5%	24.1%	48.1%	27.8%	-6.8%	0.5%	6.3%
CHEYENNE	23.2%	51.0%	25.8%	19.4%	46.2%	34.4%	-3.8%	-4.8%	8.6%
CINCINNATI	30.3%	39.8%	25.2%	30.9%	48.7%	20.4%	0.7%	8.9%	-4.8%
CLEVELAND	38.4%	47.6%	12.9%	27.4%	57.3%	14.9%	-11.0%	9.7%	2.0%
DAYTON	20.2%	40.7%	38.3%	19.3%	63.6%	17.1%	-0.9%	22.9%	-21.2%
DENVER	22.8%	51.3%	24.8%	28.1%	46.6%	25.2%	5.4%	-4.6%	0.4%
E. ORANGE	26.6%	49.5%	22.9%	26.0%	45.5%	27.3%	-0.6%	-4.0%	4.4%
HAMPTON	27.4%	41.9%	21.8%	15.1%	58.5%	26.4%	-12.4%	16.6%	4.7%
HINES (CHIC.)	24.1%	45.2%	30.7%	31.0%	52.4%	16.7%	6.9%	7.2%	-14.1%
HOUSTON	33.3%	35.9%	29.9%	26.7%	44.2%	29.1%	-6.6%	8.3%	-0.8%
INDIANAPOLIS	23.8%	42.6%	33.5%	20.6%	54.5%	23.6%	-3.2%	11.9%	-9.9%
KANSAS CITY	27.9%	42.7%	28.1%	15.3%	59.9%	24.8%	-12.6%	17.2%	-3.3%
LITTLE ROCK	21.8%	41.6%	36.4%	19.1%	37.0%	43.5%	-2.7%	-4.6%	7.1%
LONG BEACH	31.2%	45.5%	23.3%	31.8%	57.3%	10.9%	0.6%	11.8%	-12.4%
LOS ANGELES	26.6%	46.7%	25.0%	32.5%	45.8%	21.1%	6.0%	-0.9%	-3.9%
LOUISVILLE	12.6%	38.1%	48.1%	13.9%	42.2%	42.8%	1.3%	4.1%	-5.3%
MTN HOME	18.5%	42.7%	38.2%	43.2%*	36.5%	18.9%	24.7%*	-6.2%	-19.3%
NASHVILLE	14.0%	42.5%	42.5%	20.9%	40.3%	38.0%	6.9%	-2.2%	-4.5%
NEW ORLEANS	11.9%	67.2%	20.6%	10.6%	71.0%	18.4%	-1.3%	3.8%	-2.2%
NEW YORK	20.0%	43.8%	34.0%	23.5%	43.8%	32.7%	3.5%	-0.1%	-1.3%
PERRY POINT	33.0%	45.0%	18.2%	32.3%	50.6%	16.5%	-0.7%	5.6%	-1.7%
PHOENIX	20.9%	52.4%	26.2%	19.1%	56.4%	24.5%	-1.8%	4.0%	-1.7%
PITTSBURGH	22.6%	40.7%	31.0%	28.8%	45.0%	25.0%	6.2%	4.3%	-6.0%
PORTLAND	10.9%	59.2%	29.4%	18.6%	64.4%	16.9%	7.7%	5.2%	-12.5%
ROSEBURG	30.3%	51.7%	17.3%	46.4%*	35.7%	17.1%	16.1%*	-16.0%	-0.2%
SALT LAKE CITY	20.4%	36.7%	39.9%	14.8%	42.6%	42.6%	-5.6%	5.9%	2.7%
SAN ANTONIO	2.5%	49.2%	48.3%	3.0%	42.4%	54.5%	0.5%	-6.8%	6.2%
SAN DIEGO	18.4%	53.2%	28.5%	25.8%	51.2%	23.0%	7.4%	-1.9%	-5.5%
SAN FRANCISCO	21.8%	41.8%	35.5%	22.2%	48.9%	28.9%	0.4%	7.0%	-6.5%
ST LOUIS	18.8%	44.4%	35.4%	20.0%	50.6%	29.4%	1.2%	6.2%	-6.0%
SYRACUSE	37.4%	41.2%	19.1%	42.7%*	45.5%	11.2%	5.3%	4.3%	-7.9%
TAMPA	48.6%	40.1%	10.5%	38.3%	48.4%	12.9%	-10.3%	8.3%	2.4%
TUCSON	35.3%	36.4%	27.2%	40.9%	32.1%	27.0%	5.6%	-4.3%	-0.1%
TUSKEGEE	21.5%	42.9%	35.6%	27.5%	42.0%	30.4%	6.1%	-0.9%	-5.2%
WALLA WALLA	11.5%	38.7%	49.8%	5.9%	47.9%	46.2%	-5.6%	9.2%	-3.6%
WASH	21.9%	42.1%	32.1%	21.8%	57.2%	21.1%	-0.1%	15.1%	-11.0%
WEST LOS ANGELES	30.3%	32.9%	35.7%	41.5%	26.9%	31.6%	11.2%	-6.0%	-4.1%
WILKES BARRE	23.9%	47.6%	23.2%	24.6%	58.9%	16.5%	0.7%	11.3%	-6.7%
AVERAGE	24.6%	44.3%	29.4%	25.1%	48.5%	26.1%	0.5%	4.2%	-3.3%
STANDARD DEVIATION	9.0%	6.8%	9.1%	9.9%	9.8%	10.7%	7.6%	7.9%	7.4%

* = Value is 1.68 standard deviations above the mean for all sites.

TABLE A-3-5. MODE OF FIRST CONTACT WITH THE HCMI PROGRAM, 1987/1989 AND 1989/1990.

SITE	FIRST CONTACT: 1987/1989			FIRST CONTACT: 1989/1990			CHANGE IN MODE OF CONTACT		
	OUTREACH	CAME TO VA	OTHER	OUTREACH	CAME TO VA*	OTHER	OUTREACH	CAME TO VA*	OTHER
ATLANTA	55.2%	36.3%	8.5%	48.0%	50.0%	1.2%	-7.2%	13.7%	-33.9%
AUGUSTA	39.8%	30.4%	29.8%	12.5%	75.0%*	12.5%	-27.3%	44.6%*	-17.9%
BATH	62.0%	18.3%	19.7%	58.3%	6.9%	34.9%	-3.7%	-11.4%	17.6%
BOSTON	22.6%	36.8%	40.7%	79.0%	7.4%	13.6%	56.5%	-29.4%	-21.7%
BUFFALO	75.2%	16.6%	8.3%	68.9%	17.2%	13.9%	-6.3%	0.6%	-1.6%
CHARLESTON	64.2%	32.5%	3.3%	55.3%	41.6%	3.2%	-8.9%	9.1%	-27.5%
CHEYENNE	47.7%	38.6%	13.7%	60.2%	22.6%	17.2%	12.5%	-16.0%	-17.4%
CINCINNATI	58.8%	35.5%	5.7%	46.8%	43.0%	10.0%	-12.0%	7.5%	-24.8%
CLEVELAND	71.2%	10.8%	18.0%	59.9%	22.3%	17.8%	-11.3%	11.5%	8.3%
DAYTON	45.1%	48.3%	6.7%	56.6%	41.4%	2.1%	11.6%	-6.9%	-43.5%
DENVER	84.8%	1.9%	13.4%	80.6%	14.4%	0.5%	-4.1%	12.5%	-1.2%
E. ORANGE	48.7%	26.5%	24.8%	41.6%	24.7%	33.8%	-7.1%	-1.8%	10.0%
HAMPTON	59.9%	26.5%	13.7%	60.8%	22.3%	16.8%	0.9%	-4.2%	-8.4%
HINES (CHIC.)	34.3%	59.8%	5.9%	68.1%	30.6%	1.4%	33.8%	-29.2%	-56.5%
HOUSTON	64.1%	29.1%	6.8%	69.6%	22.2%	8.2%	5.5%	-6.8%	-18.8%
INDIANAPOLIS	43.0%	15.4%	41.7%	85.3%	12.9%	1.8%	42.3%	-2.5%	-11.1%
KANSAS CITY	39.4%	42.2%	18.4%	52.9%	29.0%	18.1%	13.5%	-13.2%	-21.3%
LITTLE ROCK	50.0%	26.0%	24.0%	34.3%	62.9%*	2.8%	-15.7%	36.9%*	-18.9%
LONG BEACH	29.6%	60.0%	10.4%	18.0%	56.8%	25.2%	-11.6%	-3.2%	-30.0%
LOS ANGELES	17.2%	56.4%	26.5%	21.3%	62.7%*	16.0%	4.2%	6.3%	-37.7%
LOUISVILLE	88.5%	0.8%	10.7%	93.1%	0.0%	6.9%	4.6%	-0.8%	6.1%
MTN HOME	27.5%	32.6%	39.9%	41.9%	33.8%	24.3%	14.4%	1.2%	6.7%
NASHVILLE	70.3%	16.0%	13.7%	46.5%	23.3%	30.2%	-23.8%	7.3%	16.5%
NEW ORLEANS	11.7%	73.0%	15.3%	19.5%	64.6%*	16.0%	7.8%	-8.4%	-53.8%
NEW YORK	55.9%	38.9%	5.2%	45.3%	39.2%	15.5%	-10.6%	0.3%	-16.9%
PERRY POINT	55.2%	15.7%	29.1%	60.6%	18.1%	21.3%	5.4%	2.4%	10.4%
PHOENIX	37.6%	26.9%	35.5%	17.5%	49.5%	33.0%	-20.1%	22.6%	9.9%
PITTSBURGH	74.5%	16.3%	9.2%	56.8%	9.9%	33.3%	-17.7%	-6.4%	18.2%
PORTLAND	88.6%	7.6%	3.8%	66.1%	16.9%	16.9%	-22.5%	9.3%	9.3%
ROSEBURG	58.5%	27.6%	13.9%	62.1%	27.0%	11.0%	3.6%	-0.6%	1.1%
SALT LAKE CITY	38.0%	44.5%	17.5%	46.1%	0.7%	46.9%	8.1%	-43.8%	41.6%
SAN ANTONIO	28.4%	40.7%	30.9%	27.6%	27.6%	44.9%	-0.8%	-13.1%	40.0%
SAN DIEGO	8.6%	30.3%	61.1%	9.2%	22.8%	68.0%	0.6%	-7.5%	39.2%
SAN FRANCISCO	73.7%	13.1%	13.2%	67.6%	22.8%	9.6%	-6.1%	9.7%	7.9%
ST LOUIS	15.8%	32.2%	52.1%	6.9%	63.0%*	30.1%	-8.9%	30.8%*	17.3%
SYRACUSE	61.1%	17.2%	21.7%	47.9%	15.5%	36.6%	-13.2%	-1.7%	22.9%
TAMPA	51.9%	4.3%	43.9%	75.4%	13.5%	11.2%	23.5%	9.3%	8.5%
TUCSON	64.8%	15.9%	19.3%	39.2%	44.4%	16.4%	-25.6%	28.5%	1.9%
TUSKEGEE	72.9%	19.2%	7.9%	61.0%	31.9%	7.1%	-11.9%	12.7%	-12.1%
WALLA WALLA	75.2%	11.7%	13.0%	87.6%	11.2%	1.2%	12.4%	-0.5%	-6.1%
WASHINGTON, DC	73.9%	10.1%	16.1%	81.0%	9.9%	9.2%	7.1%	-0.2%	0.4%
WEST LOS ANGELES	81.6%	5.7%	12.7%	87.3%	6.0%	6.6%	5.7%	0.3%	1.5%
WILKES BARRE	47.2%	28.6%	24.3%	38.2%	51.6%	10.2%	-8.9%	23.0%	-15.7%
AVERAGE	52.9%	27.4%	19.8%	52.6%	29.5%	17.6%	-0.3%	2.2%	-4.7%
STANDARD DEVIATION	20.9%	16.4%	13.5%	22.4%	19.1%	14.3%	17.1%	16.5%	22.8%

* = Value is 1.68 standard deviations above the mean for all sites.

TABLE A-3-6. PSYCHIATRIC AND SUBSTANCE ABUSE DIAGNOSES, 1989/1990.

SITE	PSYCH. NON-S.A. DIAGNOSIS	SCHIZO-PHRENIA	ALCOHOL ABUSE	DRUG ABUSE	PSYCH.OR SUBST. ABUSE*
ATLANTA, GA	20.4%	5.2%	62.3%	56.0%	84.4%*
AUGUSTA, GA	50.0%	12.5%	69.7%	53.6%	98.2%
BATH, NY	72.5%	13.3%	63.8%	28.4%	97.7%
BOSTON, (OPC) MA	76.3%	11.9%	71.3%	31.5%	93.8%
BUFFALO, NY	72.7%	27.8%	66.5%	39.7%	95.7%
CHARLESTON, SC	39.5%	10.5%	78.9%	34.2%	99.5%
CHEYENNE, WY	90.3%	15.1%	76.3%	29.0%	100.0%
CINCINNATI, OH	62.4%	8.9%	58.2%	29.3%	94.9%
CLEVELAND, OH	62.4%	11.6%	81.4%	69.4%	99.6%
DAYTON, OH	52.1%	4.1%	73.1%	45.2%	96.6%
DENVER, CO	98.8%	6.3%	48.7%	14.7%	99.7%
EAST ORANGE, NJ	85.7%	46.7%	51.3%	27.6%	96.1%
HAMPTON, VA	61.9%	14.4%	60.5%	36.5%	92.7%
HINES, IL	90.6%	20.9%	50.9%	30.0%	95.8%
HOUSTON, TX	87.8%	18.0%	41.3%	36.0%	98.3%
INDIANAPOLIS, IN	37.3%	7.9%	69.5%	29.8%	95.8%
KANSAS CITY, MO	50.6%	5.7%	61.8%	43.2%	99.4%
LITTLE ROCK, AR	60.2%	10.3%	63.6%	35.0%	99.2%
LONG BEACH, CA	84.7%	13.5%	55.0%	18.0%	98.2%
LOS ANGELES, CA	70.5%	12.6%	34.3%	35.3%	87.3%*
LOUISVILLE, KY	94.3%	9.2%	81.0%	32.8%	98.3%
MTN. HOME, TN	70.1%	18.4%	79.1%	20.4%	100.0%
NASHVILLE, TN	46.9%	10.8%	78.5%	31.5%	98.5%
NEW ORLEANS, LA	47.8%	12.8%	62.6%	39.3%	93.8%
NEW YORK, NY	76.2%	10.8%	48.5%	37.6%	87.4%*
PERRY POINT, MD	75.2%	11.9%	79.4%	48.7%	99.4%
PHOENIX, AZ	84.5%	26.8%	53.6%	28.9%	95.9%
PITTSBURGH, PA	82.7%	23.5%	81.2%	32.5%	97.5%
PORTLAND, OR	53.3%	8.3%	86.7%	42.4%	100.0%
ROSEBURG, OR	45.4%	8.9%	78.6%	11.0%	95.7%
SALT LK. CITY, U	68.0%	13.6%	58.8%	17.5%	90.4%
SAN ANTONIO, TX	72.2%	12.1%	74.7%	24.5%	100.0%
SAN DIEGO, CA	84.7%	8.8%	54.4%	39.5%	97.6%
SAN FRANCISCO, C	83.8%	12.5%	65.8%	36.5%	98.9%
ST. LOUIS, MO	50.2%	7.9%	66.6%	42.7%	97.9%
SYRACUSE, NY	65.0%	10.5%	60.1%	24.5%	93.7%
TAMPA, FL	68.3%	8.8%	47.9%	19.5%	91.9%
TUCSON, AZ	59.2%	13.2%	62.2%	25.6%	90.8%
TUSKEGEE, AL	95.7%	15.1%	60.9%	33.8%	100.0%
WALLA WALLA, WA	66.1%	7.1%	80.5%	40.2%	94.0%
WASHINGTON, D.C.	46.5%	9.9%	61.1%	56.1%	96.6%
WEST LA, CA	87.0%	18.2%	67.3%	34.7%	94.3%
WILKES-BARRE, PA	84.0%	16.0%	78.9%	36.4%	98.6%
AVERAGE	68.2%	13.3%	65.3%	34.4%	96.1%
STANDARD DEV.	17.9%	7.3%	12.1%	11.4%	3.7%

* = Value is 1.68 standard deviations below the mean for all sites.

TABLE A-3-7. PAST HOSPITALIZATION FOR PSYCHIATRIC OR SUBSTANCE ABUSE PROBLEMS.

SITE	PSYCHIATRIC HOSP. 87/89	89/90	CHANGE	ALCOHOL HOSP. 87/89	89/90	CHANGE	DRUG ABUSE HOSP. 87/89	89/90	CHANGE
ATLANTA	21.8%	19.6%	-2.2%	41.0%	40.7%	-0.3%	30.5%	34.3%	3.8%
AUGUSTA	32.1%	33.3%	1.2%	55.3%	64.3%	9.0%	23.6%	51.8%	28.2%
BATH	35.6%	23.9%	-11.7%	63.8%	48.6%	-15.2%	14.4%	23.4%	9.0%
BOSTON	48.1%	38.6%	-9.5%	57.3%	55.6%	-1.7%	16.9%	19.8%	2.9%
BUFFALO	40.3%	41.4%	1.1%	37.9%	48.1%	10.2%	19.7%	34.5%	14.8%
CHARLESTON	26.2%	23.7%	-2.5%	50.3%	55.0%	4.7%	13.9%	24.8%	10.9%
CHEYENNE	36.4%	46.2%	9.8%	58.7%	62.4%	3.7%	13.6%	23.7%	10.1%
CINCINNATI	32.3%	25.3%	-7.0%	44.0%	43.0%	-1.0%	16.7%	25.3%	8.6%
CLEVELAND	34.0%	33.1%	-0.9%	47.6%	51.7%	4.1%	33.4%	44.2%	10.8%
DAYTON	40.4%	21.9%	-18.5%	49.2%	62.8%	13.6%	22.1%	43.8%	21.7%
DENVER	18.2%	24.3%	6.1%	49.3%	45.3%	-4.0%	16.1%	16.6%	0.5%
E. ORANGE	50.5%	67.5%	17.0%	46.8%	46.8%	0.0%	27.5%	27.6%	0.1%
HAMPTON	29.4%	38.1%	8.7%	48.6%	48.9%	0.3%	17.2%	25.7%	8.5%
HINES (CHIC.)	72.5%	47.2%	-25.3%	47.1%	40.7%	-6.4%	16.9%	20.9%	4.0%
HOUSTON	62.9%	50.0%	-12.9%	43.6%	31.4%	-12.2%	23.0%	32.6%	9.6%
INDIANAPOLIS	28.5%	22.3%	-6.2%	51.7%	54.8%	3.1%	16.9%	29.7%	12.8%
KANSAS CITY	34.8%	29.5%	-5.3%	50.0%	52.2%	2.2%	19.1%	39.5%	20.4%
LITTLE ROCK	37.0%	34.9%	-2.1%	53.3%	60.8%	7.5%	18.8%	38.2%	19.4%
LONG BEACH	41.4%	43.2%	1.8%	36.3%	45.1%	8.8%	12.0%	10.8%	-1.2%
LOS ANGELES	21.1%	28.2%	7.1%	34.4%	34.5%	0.1%	19.0%	33.1%	14.2%
LOUISVILLE	36.0%	37.9%	1.9%	53.1%	55.8%	2.7%	16.5%	21.3%	4.8%
MTN HOME	39.8%	33.8%	-6.0%	72.3%	79.1%	6.8%	22.3%	18.9%	-3.4%
NASHVILLE	27.6%	32.3%	4.7%	41.9%	55.0%	13.1%	10.9%	17.8%	7.0%
NEW ORLEANS	28.0%	27.2%	-0.8%	7.9%	39.7%	-8.2%	22.5%	28.0%	5.5%
NEW YORK	29.1%	27.2%	-1.9%	31.3%	38.5%	7.2%	27.4%	33.3%	5.9%
PERRY POINT	37.0%	37.1%	0.1%	56.7%	70.8%	14.1%	19.3%	41.0%	21.7%
PHOENIX	75.8%	76.3%	0.5%	42.8%	57.7%	14.9%	15.5%	20.6%	5.1%
PITTSBURGH	45.7%	48.2%	2.5%	54.8%	61.7%	6.9%	26.8%	27.2%	0.4%
PORTLAND	28.3%	19.7%	-8.6%	45.8%	67.2%	21.5%	19.8%	39.3%	19.5%
ROSEBURG	22.5%	22.0%	-0.5%	58.7%	70.5%	11.8%	9.2%	7.8%	-1.4%
SALT LAKE CITY	29.4%	29.4%	0.0%	42.6%	43.9%	1.3%	14.4%	15.8%	1.4%
SAN ANTONIO	41.7%	44.4%	2.7%	50.2%	45.5%	-4.7%	12.8%	14.1%	1.3%
SAN DIEGO	66.2%	41.1%	-25.1%	42.3%	43.9%	1.6%	21.7%	23.8%	2.1%
SAN FRANCISCO	37.5%	30.1%	-7.4%	31.7%	47.6%	15.9%	18.3%	28.7%	10.4%
ST LOUIS	28.9%	34.9%	6.0%	45.8%	62.5%	16.7%	20.6%	39.5%	18.9%
SYRACUSE	40.3%	23.8%	-16.5%	45.6%	41.3%	-4.3%	10.3%	18.9%	8.6%
TAMPA	26.6%	35.5%	8.9%	31.4%	40.2%	8.8%	8.4%	13.1%	4.7%
TUCSON	30.3%	37.4%	7.1%	40.1%	49.0%	8.9%	12.4%	17.1%	4.7%
TUSKEGEE	36.7%	43.3%	6.6%	47.5%	37.6%	-9.9%	11.3%	21.3%	10.0%
WALLA WALLA	27.7%	23.8%	-3.9%	58.0%	61.5%	3.5%	19.7%	26.0%	6.3%
WASHINGTON, DC	21.0%	20.0%	-1.0%	30.0%	31.2%	1.2%	15.7%	35.7%	20.0%
WEST LOS ANGELES	24.4%	35.0%	10.6%	52.4%	61.9%	9.5%	22.0%	32.7%	10.7%
WILKES BARRE	39.3%	26.3%	-13.0%	64.8%	62.7%	-2.1%	20.2%	26.9%	6.7%
AVERAGE	36.4%	34.4%	-2.0%	47.8%	51.6%	3.8%	18.3%	27.2%	8.8%
STANDARD DEVIATION	12.9%	11.8%	9.0%	9.2%	11.2%	8.0%	5.5%	9.8%	7.3%

TABLE A-3-8. APPROPRIATENESS FOR RESIDENTIAL TREATMENT AS DOCUMENTED AT INTAKE, FOR VETERANS DISCHARGED FROM RESIDENTIAL TREATMENT.

SITE	Number of Discharges (Total)	Income > $1,000	Living in Own Apt. Room/Hse.	No Psych. or S.A. Diagnosis	Inapprop. For Any Reason
ATLANTA, GA	122	1.6%	0.0%	2.5%	4.1%
AUGUSTA, GA	85	2.4%	1.2%	1.2%	4.7%
BATH, NY	100	1.0%	0.0%	0.0%	1.0%
BOSTON, (OPC) MA	13	7.7%	0.0%	0.0%	7.7%
BUFFALO, NY	10	0.0%	10.0%	0.0%	10.0%
CHARLESTON, SC	72	0.0%	0.0%	0.0%	0.0%
CHEYENNE, WY	33	3.0%	3.0%	0.0%	6.1%
CINCINNATI, OH	94	1.1%	10.6%	12.8%	21.3%*
CLEVELAND, OH	114	5.3%	4.4%	0.0%	9.6%
DAYTON, OH	31	0.0%	0.0%	0.0%	0.0%
DENVER, CO	235	1.7%	1.3%	4.7%	7.2%
EAST ORANGE, NJ	35	0.0%	0.0%	0.0%	0.0%
HAMPTON, VA	40	0.0%	5.0%	2.5%	7.5%
HINES, IL	45	0.0%	2.2%	2.2%	4.4%
HOUSTON, TX	61	0.0%	13.1%	1.6%	14.8%
INDIANAPOLIS, IN	76	0.0%	0.0%	2.6%	2.6%
KANSAS CITY, MO	206	0.0%	1.0%	18.9%	19.9%*
LITTLE ROCK, AR	94	2.1%	3.2%	2.1%	7.4%
LONG BEACH, CA	53	1.9%	1.9%	0.0%	3.8%
LOS ANGELES, CA	21	9.5%	4.8%	4.8%	14.3%
LOUISVILLE, KY	114	0.0%	0.0%	0.9%	0.9%
MTN. HOME, TN	42	0.0%	0.0%	0.0%	0.0%
NASHVILLE, TN	8	12.5%	0.0%	0.0%	12.5%
NEW ORLEANS, LA	70	0.0%	0.0%	11.4%	11.4%
NEW YORK, NY	5	0.0%	0.0%	20.0%	20.0%
PERRY POINT, MD	164	1.8%	0.6%	0.0%	2.4%
PHOENIX, AZ	43	0.0%	0.0%	0.0%	0.0%
PITTSBURGH, PA	76	2.6%	3.9%	0.0%	6.6%
PORTLAND, OR	40	2.5%	2.5%	0.0%	5.0%
ROSEBURG, OR	51	0.0%	0.0%	2.0%	2.0%
SALT LK. CITY, UT	21	0.0%	0.0%	0.0%	0.0%
SAN ANTONIO, TX	58	0.0%	0.0%	3.4%	3.4%
SAN DIEGO, CA	101	5.0%	2.0%	2.0%	7.9%
SAN FRANCISCO, CA	18	0.0%	5.6%	0.0%	5.6%
ST. LOUIS, MO	128	2.3%	0.0%	2.3%	4.7%
SYRACUSE, NY	19	0.0%	0.0%	15.8%	15.8%
TAMPA, FL	122	0.0%	2.5%	5.7%	6.6%
TUCSON, AZ	75	0.0%	4.0%	10.7%	14.7%
TUSKEGEE, AL	15	0.0%	0.0%	13.3%	13.3%
WALLA WALLA, WA	17	5.9%	0.0%	0.0%	5.9%
WASHINTON, D.C.	81	2.5%	0.0%	0.0%	2.5%
WEST LA, CA	32	0.0%	0.0%	3.1%	3.1%
WILKES-BARRE, PA	114	4.4%	6.1%	0.0%	10.5%
TOTAL	2954				
AVERAGE	69	1.8%	2.1%	3.4%	7.0%
STANDARD DEV.	51	2.8%	3.1%	5.4%	5.8%

* = Value is 1.68 standard deviations above the mean for all sites.

TABLE A-3-9. PSYCHIATRIC AND SUBSTANCE ABUSE PROBLEMS IDENTIFIED AT THE TIME OF DISCHARGE FROM RESIDENTIAL TREATMENT.

SITE	Number of Discharges (Total)	SUBSTANCE ABUSE PROB. AT DISCHARGE	PSYCH. PROB. AT DISCHARGE	EITHER PSYCH. OR SUBS. AB.*
ATLANTA, GA	122	93.4%	14.8%	100.0%
AUGUSTA, GA	85	85.9%	41.2%	100.0%
BATH, NY	100	85.0%	50.0%	100.0%
BOSTON, (OPC) MA	13	100.0%	100.0%	100.0%
BUFFALO, NY	10	90.0%	100.0%	100.0%
CHARLESTON, SC	72	91.7%	25.0%	100.0%
CHEYENNE, WY	33	100.0%	75.8%	100.0%
CINCINNATI, OH	94	72.3%	45.7%	91.5%*
CLEVELAND, OH	114	97.4%	31.6%	100.0%
DAYTON, OH	31	100.0%	6.5%	100.0%
DENVER, CO	235	81.3%	39.6%	92.3%*
EAST ORANGE, NJ	35	48.6%	100.0%	100.0%
HAMPTON, VA	40	97.5%	47.5%	100.0%
HINES, IL	45	37.8%	100.0%	100.0%
HOUSTON, TX	61	54.1%	100.0%	100.0%
INDIANAPOLIS, IN	76	85.5%	32.9%	100.0%
KANSAS CITY, MO	206	84.5%	39.8%	100.0%
LITTLE ROCK, AR	94	81.9%	27.7%	93.6%*
LONG BEACH, CA	53	71.7%	90.6%	100.0%
LOS ANGELES, CA	21	100.0%	9.5%	100.0%
LOUISVILLE, KY	114	95.6%	46.5%	99.1%
MTN. HOME, TN	42	88.1%	59.5%	100.0%
NASHVILLE, TN	8	100.0%	0.0%	100.0%
NEW ORLEANS, LA	70	74.3%	48.6%	100.0%
NEW YORK, NY	5	20.0%	60.0%	100.0%
PERRY POINT, MD	164	81.7%	52.4%	100.0%
PHOENIX, AZ	43	116.3%	97.7%	100.0%
PITTSBURGH, PA	76	82.9%	80.3%	100.0%
PORTLAND, OR	40	97.5%	12.5%	100.0%
ROSEBURG, OR	51	86.3%	64.7%	100.0%
SALT LK. CITY, UT	21	100.0%	14.3%	100.0%
SAN ANTONIO, TX	58	79.3%	72.4%	100.0%
SAN DIEGO, CA	101	49.5%	100.0%	100.0%
SAN FRANCISCO, CA	18	94.4%	61.1%	100.0%
ST. LOUIS, MO	128	93.8%	32.8%	100.0%
SYRACUSE, NY	19	63.2%	94.7%	100.0%
TAMPA, FL	122	80.3%	75.4%	98.4%
TUCSON, AZ	75	66.7%	69.3%	94.7%
TUSKEGEE, AL	15	73.3%	53.3%	100.0%
WALLA WALLA, WA	17	88.2%	47.1%	100.0%
WASHINGTON, D.C.	81	90.1%	51.9%	100.0%
WEST LA, CA	32	87.5%	9.4%	87.5%
WILKES-BARRE, PA	114	78.9%	64.0%	99.1%
TOTAL	2954			
AVERAGE	69	82.5%	54.6%	99.0%
STANDARD DEV.	51	18.4%	29.7%	2.7%

* = Value is 1.68 standard deviations below the mean for all sites.

TABLE A-3-10. NUMBER OF DISCHARGES, LENGTH OF STAY AND COST OF RESIDENTIAL TREATMENT, BY SITE: ALL ADMISSIONS, FIRST ADMISSIONS AND READMISSIONS.

	ALL ADMISSIONS				FIRST ADMISSIONS				RE-ADMISSIONS			
SITE	Number of Discharges	Average LOS *	Average Cost/Ep.*	Average Per Diem*	Number of Discharges	Percent 1st Adms.	Average LOS	Average Cost	Number of Discharges	Percent Re-Adms.*	Average LOS	Average Cost
ATLANTA, GA	128	49.0	$1,182	$24.12	111	86.7%	47.5	$1,173	17	13.3%	58.6	$1,241
AUGUSTA, GA	86	44.5	$1,127	$25.34	57	66.3%	49.0	$1,251	29	33.7%	35.7	$883
BATH, NY	101	67.1	$1,941	$28.91	83	82.2%	68.6	$1,979	18	17.8%	60.3	$1,768
BOSTON, (OPC) MA	13	127.2 *	$7,629 *	$60.00 *	11	84.6%	116.8	$7,009	2	15.4%	184.0	$11,040
BUFFALO, NY	10	102.7	$5,176	$50.40	9	90.0%	110.8	$5,584	1	10.0%	30.0	$1,512
CHARLESTON, SC	82	68.6	$2,402	$34.99	69	84.1%	70.5	$2,468	13	15.9%	58.7	$2,054
CHEYENNE, WY	58	78.1	$2,963	$37.96	45	77.6%	78.0	$2,956	13	22.4%	78.2	$2,990
CINCINNATI, OH	95	64.8	$2,817	$43.45	74	77.9%	72.7	$3,151	21	22.1%	37.3	$1,641
CLEVELAND, OH	119	63.3	$1,960	$30.99	102	85.7%	63.3	$1,954	17	14.3%	62.9	$2,001
DAYTON, OH	53	70.7	$4,486	$63.49 *	43	81.1%	72.0	$4,611	10	18.9%	64.8	$3,950
DENVER, CO	225	48.2	$2,069	$42.97	189	84.0%	47.6	$2,045	36	16.0%	51.1	$2,196
EAST ORANGE, NJ	34	78.4	$2,351	$29.99	29	85.3%	70.8	$2,122	5	14.7%	122.6	$3,678
HAMPTON, VA	39	92.7	$3,989	$43.03	35	89.7%	93.5	$3,954	4	10.3%	85.5	$4,291
HINES, IL	46	68.1	$2,675	$39.28	37	80.4%	68.7	$2,720	9	19.6%	65.6	$2,489
HOUSTON, TX	63	118.8	$2,970	$25.00	52	82.5%	117.3	$2,931	11	17.5%	126.3	$3,156
INDIANAPOLIS, IN	103	62.6	$2,006	$32.07	85	82.5%	64.9	$2,073	18	17.5%	51.3	$1,688
KANSAS CITY, MO	213	56.2	$1,910	$34.00	135	63.4%	59.5	$2,035	78	36.6%*	50.4	$1,693
LITTLE ROCK, AR	103	34.8	$1,137	$32.65	79	76.7%	34.1	$1,121	24	23.3%	37.1	$1,191
LONG BEACH, CA	58	56.2	$2,807	$49.99	41	70.7%	56.8	$2,839	17	29.3%	54.6	$2,732
LOS ANGELES, CA	21	127.4 *	$6,371 *	$50.00	21	100.0%	127.4	$6,371	0	0.0%	0.0	$0
LOUISVILLE, KY	156	70.7	$2,073	$29.32	96	61.5%	70.6	$2,022	60	38.5%*	71.0	$2,154
MIN. HOME, IN	93	53.9	$1,872	$34.74	62	66.7%	59.5	$2,061	31	33.3%	42.7	$1,493
NASHVILLE, TN	7	45.4	$1,817	$40.00	7	100.0%	45.4	$1,817	0	0.0%	0.0	$0
NEW ORLEANS, LA	174	98.1	$3,516	$35.85	147	84.5%	101.1	$3,606	27	15.5%	81.4	$3,027
NEW YORK, NY	12	149.1 *	$4,388	$29.43	12	100.0%	149.1	$4,388	0	0.0%	0.0	$0
PERRY POINT, MD	180	47.1	$1,746	$37.07	132	73.3%	44.3	$1,628	48	26.7%	54.8	$2,069
PHOENIX, AZ	44	129.7 *	$8,216 *	$63.35 *	39	88.6%	129.0	$8,143	5	11.4%	135.2	$8,788

* - Value is 1.68 standard deviations above the mean for all sites.

TABLE A-3.10 (CONT'D). NUMBER OF DISCHARGES, LENGTH OF STAY AND COST OF RESIDENTIAL TREATMENT, BY SITE: ALL ADMISSIONS, FIRST ADMISSIONS AND READMISSIONS.

	ALL ADMISSIONS				FIRST ADMISSIONS				RE-ADMISSIONS			
SITE	Number of Discharges	Average LOS *	Average Cost/Ep.*	Average Per Diem*	Number of Discharges	Percent 1st Adms.	Average LOS	Average Cost	Number of Discharges	Percent Re-Adms.*	Average LOS	Average Cost
PITTSBURGH, PA	83	72.6	$3,565	$49.14	58	69.9%	71.1	$3,489	25	30.1%	75.9	$3,740
PORTLAND, OR	42	63.2	$2,499	$39.53	38	90.5%	63.6	$2,556	4	9.5%	60.0	$1,952
ROSEBURG, OR	52	69.8	$1,980	$28.37	49	94.2%	70.8	$2,007	3	5.8%	53.0	$1,532
SALT LK. CITY, U	21	55.9	$1,117	$20.00	18	85.7%	58.2	$1,163	3	14.3%	42.0	$840
SAN ANTONIO, TX	60	118.6	$3,083	$26.00	42	70.0%	137.6	$3,578	18	30.0%	74.2	$1,928
SAN DIEGO, CA	145	43.5	$1,985	$45.67	106	73.1%	40.0	$1,768	39	26.9%	52.9	$2,576
SAN FRANCISCO, C	50	110.5	$5,452	$49.32	42	84.0%	118.5	$5,811	8	16.0%	68.5	$3,568
ST. LOUIS, MO	161	85.5	$2,480	$29.02	119	73.9%	80.9	$2,325	42	26.1%	98.5	$2,918
SYRACUSE, NY	20	98.0	$2,424	$24.75	17	85.0%	110.4	$2,731	3	15.0%	27.7	$685
TAMPA, FL	135	38.7	$1,296	$33.53	107	79.3%	40.7	$1,355	28	20.7%	38.8	$1,071
TUCSON, AZ	134	50.3	$1,590	$31.63	96	71.6%	42.5	$1,473	38	28.4%	69.9	$1,884
TUSKEGEE, AL	18	94.4	$3,775	$40.00	16	88.9%	85.9	$3,435	2	11.1%	162.5	$6,500
WALLA WALLA, WA	19	67.8	$3,149	$46.42	19	100.0%	67.8	$3,149	0	0.0%	0.0	$0
WASHINGTON, D.C.	81	57.0	$2,848	$49.95	68	84.0%	56.5	$2,852	13	16.0%	59.8	$2,830
WEST LA, CA	30	79.8	$4,993	$62.55 *	26	86.7%	79.5	$5,004	4	13.3%	82.0	$4,920
WILKES-BARRE, PA	120	37.8	$1,399	$37.05	107	89.2%	40.2	$1,495	13	10.8%	17.9	$606
TOTAL	3487				2730				757			
AVERAGE	77.5	74.8	$2,959	$38.64	63.5	82.1%	75.7	$2,981	17.6	17.9%	62.2	$2,495
STD DEV.	58.1	28.2	$1,646	$11.07	42.6	9.6%	29.2	$1,629	17.2	9.6%	39.0	$2,129

* - Value is 1.68 standard deviations above the mean for all sites.

TABLE A-3-11. LENGTH OF STAY BY SITE.

SITE	Number of Discharges	0-6 Months	6-9 Months	9-12 Months	> 1 Year	Total > 6 Mos.*
ATLANTA, GA	128	100.0%	0.0%	0.0%	0.0%	0.0%
AUGUSTA, GA	86	95.4%	3.5%	1.2%	0.0%	4.7%
BATH, NY	101	93.1%	7.0%	0.0%	0.0%	7.0%
BOSTON, (OPC) MA	13	69.2%	23.1%	0.0%	7.7%	30.8%*
BUFFALO, NY	10	80.0%	20.0%	0.0%	0.0%	20.0%
CHARLESTON, SC	82	100.0%	0.0%	0.0%	0.0%	0.0%
CHEYENNE, WY	58	89.7%	8.6%	1.7%	0.0%	10.3%
CINCINNATI, OH	95	92.6%	6.3%	1.1%	0.0%	7.4%
CLEVELAND, OH	119	100.0%	0.0%	0.0%	0.0%	0.0%
DAYTON, OH	53	96.2%	1.9%	1.9%	0.0%	3.8%
DENVER, CO	225	99.1%	0.4%	0.4%	0.0%	0.8%
EAST ORANGE, NJ	34	85.3%	14.7%	0.0%	0.0%	14.7%
HAMPTON, VA	39	92.3%	7.7%	0.0%	0.0%	7.7%
HINES, IL	46	100.0%	0.0%	0.0%	0.0%	0.0%
HOUSTON, TX	63	79.4%	14.3%	4.8%	1.6%	20.7%
INDIANAPOLIS, IN	103	96.1%	2.9%	0.0%	1.0%	3.9%
KANSAS CITY, MO	213	94.4%	3.8%	1.4%	0.5%	5.7%
LITTLE ROCK, AR	103	97.1%	2.9%	0.0%	0.0%	2.9%
LONG BEACH, CA	58	98.3%	1.7%	0.0%	0.0%	1.7%
LOS ANGELES, CA	21	85.7%	9.5%	4.8%	0.0%	14.3%
LOUISVILLE, KY	156	91.0%	7.1%	1.3%	0.7%	9.1%
MTN. HOME, TN	93	100.0%	0.0%	0.0%	0.0%	0.0%
NASHVILLE, TN	7	100.0%	0.0%	0.0%	0.0%	0.0%
NEW ORLEANS, LA	174	79.3%	20.1%	0.6%	0.0%	20.7%
NEW YORK, NY	12	75.0%	8.3%	8.3%	8.3%	25.0%*
PERRY POINT, MD	180	98.3%	1.7%	0.0%	0.0%	1.7%
PHOENIX, AZ	44	72.7%	27.3%	0.0%	0.0%	27.3%*
PITTSBURGH, PA	83	90.4%	9.7%	0.0%	0.0%	9.7%
PORTLAND, OR	42	97.6%	2.4%	0.0%	0.0%	2.4%
ROSEBURG, OR	52	98.1%	1.9%	0.0%	0.0%	1.9%
SALT LK. CITY, UT	21	100.0%	0.0%	0.0%	0.0%	0.0%
SAN ANTONIO, TX	60	78.3%	11.7%	8.3%	1.7%	21.7%
SAN DIEGO, CA	145	96.6%	2.1%	0.7%	0.7%	3.5%
SAN FRANCISCO, CA	50	94.0%	6.0%	0.0%	0.0%	6.0%
ST. LOUIS, MO	161	87.6%	7.5%	1.2%	3.7%	12.4%
SYRACUSE, NY	20	75.0%	20.0%	5.0%	0.0%	25.0%*
TAMPA, FL	135	99.3%	0.7%	0.0%	0.0%	0.7%
TUCSON, AZ	134	97.0%	3.0%	0.0%	0.0%	3.0%
TUSKEGEE, AL	18	100.0%	0.0%	0.0%	0.0%	0.0%
WALLA WALLA, WA	19	89.5%	10.5%	0.0%	0.0%	10.5%
WASHINGTON, D.C.	81	95.1%	4.9%	0.0%	0.0%	4.9%
WEST LA, CA	30	93.3%	6.7%	0.0%	0.0%	6.7%
WILKES-BARRE, PA	120	100.0%	0.0%	0.0%	0.0%	0.0%
TOTAL	3487					
AVERAGE	81.1	91.9%	6.5%	1.0%	0.6%	8.1%
STANDARD DEV.	56.9	8.6%	7.0%	2.1%	1.8%	8.6%

* = value is 1.68 standard deviations above the mean for all sites.

TABLE A-3.12. OUTCOME AT THE TIME OF DISCHARGE FROM RESIDENTIAL TREATMENT, BY SITE

		STATUS AT DISCHARGE				EMPLOYMENT STATUS									
SITE	N	Success	Drop Out/ Kick Out*	Too Ill	Other	Apartment/ Room/SRO	Transit Program	Institution*	Other/ Unknown*	Full Time	Part Time	Disabled/ Retired	Unemployed*	Other
ATLANTA, GA	128	42.2%	39.8%	1.6%	16.4%	26.6%	34.4%	4.7%	34.4%	37.5%	10.9%	3.1%	44.5%	3.9%
AUGUSTA, GA	86	20.9%	44.2%	11.6%	23.3%	29.1%	20.9%	11.6%	38.4%	26.7%	3.5%	16.3%	32.6%	20.9%
BATH, NY	101	22.8%	58.4%	17.9%	5.9%	30.7%	4.0%	22.8%	42.6%	14.9%	20.8%	13.9%	41.6%	8.9%
BOSTON, (OPC) MA	13	23.1%	61.5%	0.0%	15.4%	30.8%	0.0%	15.4%	53.9%	15.4%	7.7%	30.8%	46.2%	0.0%
BUFFALO, NY	10	70.0%	10.0%	20.0%	0.0%	50.0%	20.0%	20.0%	10.0%	20.0%	0.0%	60.0%	20.0%	0.0%
CHARLESTON, SC	82	43.9%	45.1%	4.9%	6.1%	56.1%	3.7%	7.3%	32.9%	63.4%	4.9%	8.5%	22.0%	1.2%
CHEYENNE, WY	56	36.2%	46.6%	17.2%	0.0%	43.1%	6.9%	17.2%	32.8%	24.1%	25.9%	19.0%	27.6%	3.4%
CINCINNATI, OH	95	29.5%	48.4%	12.6%	9.5%	37.9%	11.6%	14.7%	35.8%	21.5%	14.0%	29.0%	31.2%	4.3%
CLEVELAND, OH	119	38.7%	53.8%	4.2%	3.4%	29.4%	5.9%	28.6%	36.1%	15.1%	29.4%	9.2%	43.7%	2.5%
DAYTON, OH	53	39.6%	54.7%	3.8%	1.9%	41.5%	11.3%	1.9%	45.3%	47.2%	9.4%	1.9%	41.5%	0.0%
DENVER, CO	225	32.4%	61.3%	4.9%	1.3%	32.9%	2.7%	7.6%	57.3%	48.4%	11.6%	10.7%	24.9%	4.4%
EAST ORANGE, NJ	34	26.5%	53.0%	17.7%	2.9%	35.3%	0.0%	20.6%	44.1%	11.8%	2.9%	61.8%	23.5%	0.0%
HAMPTON, VA	39	43.6%	43.6%	0.0%	0.0%	51.3%	7.6%	20.5%	25.6%	35.9%	23.1%	5.1%	35.9%	0.0%
HINES, IL	46	54.4%	30.4%	13.0%	2.2%	34.8%	30.4%	17.4%	17.4%	8.7%	10.9%	60.9%	10.9%	8.7%
HOUSTON, TX	61	30.7%	40.3%	14.5%	14.5%	38.1%	23.8%	17.5%	20.6%	14.3%	22.2%	20.6%	39.7%	3.2%
INDIANAPOLIS, IN	103	28.2%	60.2%	4.9%	6.8%	39.2%	8.8%	3.9%	48.0%	34.3%	16.7%	11.8%	32.4%	4.9%
KANSAS CITY, MO	213	20.7%	57.7%	10.8%	10.8%	25.4%	7.0%	13.6%	54.0%	39.4%	5.6%	4.2%	49.8%	0.9%
LITTLE ROCK, AR	103	46.6%	38.8%	11.7%	2.9%	35.0%	3.9%	38.8%*	22.3%	26.2%	10.7%	14.6%	34.0%	14.6%
LONG BEACH, CA	58	29.3%	19.0%	12.1%	39.7%	29.3%	24.1%	32.8%*	13.8%	3.5%	12.1%	55.2%	22.4%	6.9%
LOS ANGELES, CA	21	33.3%	61.9%	0.0%	4.8%	23.8%	4.8%	0.0%	71.4%*	38.1%	4.8%	4.8%	19.1%	33.3%
LOUISVILLE, KY	156	26.9%	45.5%	18.6%	9.0%	35.9%	8.3%	21.2%	34.6%	14.1%	7.7%	10.3%	36.5%	31.4%
MTN. HOME, TN	93	33.3%	41.9%	6.5%	18.3%	38.0%	13.0%	20.7%	28.3%	35.9%	5.4%	18.5%	34.8%	5.4%
NASHVILLE, TN	7	14.3%	85.7%*	0.0%	0.0%	14.3%	0.0%	0.0%	85.7%*	57.1%	0.0%	0.0%	42.9%	0.0%
NEW ORLEANS, LA	174	37.9%	44.8%	8.1%	9.2%	37.6%	11.0%	14.5%	37.0%	34.1%	9.3%	16.2%	37.6%	2.9%
NEW YORK, NY	12	8.3%	58.3%	0.0%	33.3%	27.3%	27.3%	9.1%	36.4%	9.1%	18.2%	72.7%	0.0%	0.0%
PERRY POINT, MD	180	18.9%	51.1%	16.7%	13.3%	26.1%	14.4%	24.4%	35.0%	29.4%	5.6%	12.8%	50.0%	2.2%
PHOENIX, AZ	44	47.7%	40.9%	11.4%	0.0%	65.9%	9.1%	18.2%	6.8%	11.4%	27.3%	15.9%	29.6%	15.9%
PITTSBURGH, PA	83	38.6%	34.9%	15.7%	10.8%	31.3%	21.7%	26.5%	20.5%	4.8%	9.6%	24.1%	56.6%*	4.8%

* - Value is 1.68 standard deviations above the mean for all sites.

TABLE A-3-12 (CONT'D). OUTCOME AT THE TIME OF DISCHARGE FROM RESIDENTIAL TREATMENT, BY SITE

		STATUS AT DISCHARGE				EMPLOYMENT STATUS								
SITE	N	Success	Drop Out/ Kick Out*	Too Ill	Other	Apt ment/ Room/SRO	Transit Program	Institu- tion*	Other/ Unknown*	Full Time	Part Time	Disabled/ Retired	Unem- ployed*	Other
PORTLAND, OR	42	54.8%	42.9%	2.4%	0.0%	23.9%	35.7%	0.0%	40.4%	26.8%	29.3%	2.4%	7.3%	34.1%
ROSEBURG, OR	52	38.5%	42.3%	15.4%	3.9%	44.2%	5.8%	15.4%	34.6%	21.2%	15.4%	13.5%	42.3%	7.7%
SALT LK. CITY, UT	21	47.6%	52.4%	0.0%	0.0%	4.8%	42.9%	0.0%	52.4%	47.6%	28.6%	0.0%	23.8%	0.0%
SAN ANTONIO, TX	60	51.7%	35.0%	10.0%	3.3%	65.0%	5.0%	10.0%	20.0%	61.7%	1.7%	5.0%	28.3%	3.3%
SAN DIEGO, CA	145	54.5%	28.3%	11.0%	6.2%	33.8%	21.4%	13.8%	31.0%	11.0%	4.8%	25.5%	51.7%	6.9%
SAN FRANCISCO, CA	50	56.0%	32.0%	8.0%	4.0%	54.0%	12.0%	8.0%	26.0%	34.0%	8.0%	6.0%	40.0%	12.0%
ST. LOUIS, MO	161	34.8%	53.4%	5.0%	6.8%	22.4%	14.3%	8.7%	54.7%	29.8%	11.2%	15.5%	38.5%	5.0%
SYRACUSE, NY	20	30.0%	55.0%	5.0%	10.0%	25.0%	10.0%	5.0%	60.0%	25.0%	15.0%	25.0%	25.0%	10.0%
TAMPA, FL	135	29.6%	49.6%	17.8%	3.0%	25.9%	5.2%	26.7%	42.2%	19.4%	9.7%	21.6%	42.5%	6.7%
TUCSON, AZ	134	24.6%	41.0%	14.9%	19.4%	24.6%	20.2%	18.7%	36.6%	13.4%	14.9%	25.4%	41.0%	5.2%
TUSKEGEE, AL	18	38.9%	61.1%	0.0%	0.0%	50.0%	0.0%	11.1%	38.9%	33.3%	0.0%	5.6%	55.6%*	5.6%
WALLA WALLA, WA	19	42.1%	52.6%	5.3%	0.0%	21.1%	5.3%	31.6%*	42.1%	10.5%	0.0%	47.4%	15.8%	26.3%
WASHINGTON, D.C.	81	30.3%	35.8%	14.8%	11.1%	32.1%	12.4%	21.0%	34.6%	39.5%	2.5%	28.4%	23.5%	6.2%
WEST LA, CA	30	16.7%	50.0%	0.0%	33.3%	23.3%	26.7%	0.0%	50.0%	43.3%	13.3%	10.0%	30.0%	3.3%
WILKES-BARRE, PA	120	34.2%	48.3%	10.0%	7.5%	32.5%	11.7%	24.2%	31.7%	25.8%	10.0%	34.2%	25.8%	4.2%
SITE AVE.		35.6%	46.8%	8.7%	8.6%	34.4%	13.0%	15.0%	37.6%	27.6%	11.5%	20.4%	33.1%	7.5%
STD. DEV.		12.5%	12.7%	6.2%	9.4%	12.2%	10.5%	9.6%	15.4%	15.0%	8.3%	18.2%	12.5%	8.9%

* - Value is 1.68 standard deviations above the mean for all sites.

TABLE A-3-13. HCMI VETERANS PROGRAM CRITICAL MONITORS: OUTLIER VALUES, BY SITE.

SITE	NO. HVDS' 89/90 A-1	CHNG NO.OF HVDS' A-1	RES: APT A-3	RES: F/F A-3	RES: INST A-3	INC: >1000 A-3	HLS: <1MO A-4	CHNG PCT <1MO A-4	CAME TO VA A-5	CHNGE PCT TO VA A-5	PSY DX. A-6	INAP. FOR RTC A-8	PSY DX AT DC A-9	ALOS PER EPSDE A-10	COST/ EPSDE A-10	PCT RE ADM A-10	LONG STAY ADMS A-11	DROP OUT/ KO A-12	LIV SIT/ INST A-12	LIV SIT/ UNKN A-12	UN-EMPL A-12
ATLANTA, GA											<										
AUGUSTA, GA	<			>		>			>	>											
BATH, NY			>	>																	
BOSTON, (OPC) MA														>	>		>				
BUFFALO, NY																					
CHARLESTON, SC																					
CHEYENNE, WY																					
CINCINNATI, OH			>									>	<								
CLEVELAND, OH						>															
DAYTON, OH		>																			
DENVER, CO					>								<								
EAST ORANGE, NJ																					
HAMPTON, VA			>	>																	
HINES, IL					>																
HOUSTON, TX																					
INDIANAPOLIS, IN																					
KANSAS CITY, MO				>	>							>				>					
LITTLE ROCK, AR					>				>	>			<					>			
LONG BEACH, CA																		>			
LOS ANGELES, CA						>			>		<			>	>					>	
LOUISVILLE, KY																>					
MTN. HOME, TN							>	>													
NASHVILLE, TN						>												>		>	
NEW ORLEANS, LA									>												
NEW YORK, NY						>					<			>			>				
PERRY POINT, MD					>																
PHOENIX, AZ					>									>	>		>				
PITTSBURGH, PA		>	>		>	>															>
PORTLAND, OR	<																				
ROSEBURG, OR							>	>													
SALT LK. CITY,UT																					
SAN ANTONIO, TX				>																	
SAN DIEGO, CA			>																		
SAN FRANCISCO,CA																					
ST. LOUIS, MO				>					>	>											
SYRACUSE, NY			>				>										>				
TAMPA, FL			>																		
TUCSON, AZ		>																			
TUSKEGEE, AL																					>
WALLA WALLA, WA																			>		
WASHINGTON, D.C.						>															
WEST LA, CA																					
WILKES-BARRE, PA				>		>															

KEY:
< = Site is in lowest 5% of distribution for that variable.
> = Site is in highest 5% of distribution for that variable.

TABLE A-4-1. VETERAN CHARACTERISTICS, CLINICAL PROCESS AND OUTCOME, HCMI VETERANS PROGRAM FOLLOW-UP SITES, TOTAL PROGRAM (N=1,795)

BASELINE CHARACTERISTICS		PROCESS		OUTCOME	
Sex		Mode of First Contact		Duration of Involvement	
Male	98.3%	Outreach	44.5%	< 3 mos.	70.2%
Female	1.7%	Came to VA	34.0%	3-6 mos.	13.0%
		Other	21.5%	6-9 mos.	7.1%
Age				9-12 mos.	3.1%
< 35	28.9%	Treatment Relationship		> 12 mos.	6.8%
35-44	41.7%	(After three months)			
> 44	29.4%	Relationship Bldg.	35.3%	Termination Status*	
		Referral/Linkage	49.7%	Too ill	7.1%
Race		Active Therapy	15.0%	Not Interested in Rx.	30.8%
White	55.1%			Some Involvement	42.3%
Black	37.0%	HCMI Services		Significant Gain	12.8%
Hispanic	6.8%	Basic Services	63.5%	Didn't Terminate	7.1%
Other	1.1%	Mental Health Rx.	92.7%	Other	5.0%
		Active Therapy	35.7%		
Residence at Intake		Residential Treatment	31.5%	Last Known Residence+	
Apartment, Rm, House	11.3%			No residence/Shelter	46.1%
Shelter	46.9%			Residential Rx. (HCMI)	16.0%
No resdience	41.8%	Referrals		Residential Rx. (Non-HMCI)	3.6%
		0	6.2%	Institution	7.6%
Time Homeless		1-2	20.1%	Apartment/Room	21.1%
< 1 Month	21.0%	>2	73.7%	Other	5.7%
1 Month - 1 Year	48.0%				
> 1 Year	31.0%	Number of Contacts		Overall Improvement	
		1	21.6%	(Among those with each problem)	
Public Support		2-3	32.0%	Alcohol Abuse	55.8%
Any Public Support	41.5%	4-9	18.7%	Drug Abuse	58.2%
Any VA Support	11.2%	10-24	19.8%	Psychosis	49.7%
		=> 25	7.9%	Other Psychiatric	
Health Problems				Illness	57.6%
Psychiatric Problems	49.6%			Medical Problems	71.3%
Alcohol	57.0%	Location of Contacts		Social Skills	44.9%
Drug	29.6%	Community	40.0%	Employment	39.5%
Dual Diagnosis	32.7%	VAMC	79.1%	Finances	47.5%
Medical	53.9%	RTF	28.7%		
Past Hospitalization		Days of Res Rx (N=566)		Overall Improvement Index	
Psychiatric	38.5%	1-30	25.6%	-1.0 to -0.5	22.0%
Alcohol	47.9%	31-90	35.7%	-0.5 to 0.0	29.3%
Drug	23.1%	90-180	30.4%	0.0 to 0.5	32.8%
Any MH Hosp	73.7%	=> 180	8.3%	0.5 to 1.0	15.8%

* Data missing on 76 veterans.
+ Data missing on 195 veterans.

TABLE A-4-2. VETERAN CHARACTERISTICS, CLINICAL PROCESS AND OUTCOME, HCMI VETERANS PROGRAM FOLLOW-UP SITES, CHEYENNE (N=80)

BASELINE CHARACTERISTICS		PROCESS		OUTCOME	
Sex		Mode of First Contact		Duration of Involvement	
Male	98.7%	Outreach	41.6%	< 3 mos.	37.5%
Female	1.3%	Came to VA	40.3%	3-6 mos.	31.3%
		Other	18.2%	6-9 mos.	11.3%
Age				9-12 mos.	11.3%
< 35	21.5%	Treatment Relationship		> 12 mos.	8.8%
35-44	49.4%	(After three months)			
> 44	29.1%	Relationship Bldg.	43.8%	Termination Status	
		Referral/Linkage	56.3%	Too ill	1.4%
Race		Active Therapy	0.0%	Not Interested in Rx.	17.0%
White	78.5%			Some Involvement	67.6%
Black	7.6%	HCMI Services		Significant Gain	12.2%
Hispanic	10.1%	Basic Services	83.8%	Didn't Terminate	9.5%
Other	3.8%	Mental Health Rx.	100.0%	Other	7.5%
		Active Therapy	6.3%		
Residence at Intake		Residential Treatment	81.3%	Last Known Residence	
Apartment, Rm, House	7.7%			No residence/Shelter	31.3%
Shelter	10.3%			Residential Rx. (HCMI)	11.3%
No resdience	82.1%	Referrals		Residential Rx. (Non-HCMI)	3.8%
		0	0.0%	Institution	3.8%
Time Homeless		1-2	28.8%	Apartment/Room	47.5%
< 1 Month	25.3%	>2	71.3%	Other	2.5%
1 Month - 1 Year	34.2%				
> 1 Year	40.5%	Number of Contacts		Overall Improvement	
		1	7.5%	(Among those with each problem)	
Public Support		2-3	26.3%	Alcohol Abuse	29.2%
Any Public Support	32.5%	4-9	27.5%	Drug Abuse	33.3%
Any VA Support	7.6%	10-24	28.8%	Psychosis	30.8%
		=> 25	10.0%	Other Psychiatric	
Health Problems				Illness	27.0%
Psychiatric Problems	48.8%			Medical Problems	52.6%
Alcohol	62.8%	Location of Contacts		Social Skills	24.5%
Drug	14.1%	Community	78.8%	Employment	32.8%
Dual Diagnosis	27.8%	VAMC	97.5%	Finances	38.9%
Medical	51.9%	RTF	81.3%		
Past Hospitalization		Days of Res Rx (N=65)		Overall Improvement Index	
Psychiatric	44.2%	1-30	28.6%	-1.0 to -0.5	47.4%
Alcohol	60.3%	31-90	30.2%	-0.5 to 0.0	21.8%
Drug	15.4%	90-180	33.3%	0.0 to 0.5	20.5%
Any MH Hosp	80.5%	=> 180	7.9%	0.5 to 1.0	10.3%

TABLE A-4-3 VETERAN CHARACTERISTICS, CLINICAL PROCESS AND OUTCOME, HCMI VETERANS PROGRAM FOLLOW-UP SITES, DAYTON (N=239)

BASELINE CHARACTERISTICS	
Sex	
Male	98.3%
Female	1.7%
Age	
< 35	47.8%
35-44	38.6%
> 44	13.6%
Race	
White	53.8%
Black	39.5%
Hispanic	5.9%
Other	0.8%
Residence at Intake	
Apartment, Rm, House	22.9%
Shelter	41.5%
No resdience	35.6%
Time Homeless	
< 1 Month	17.7%
1 Month - 1 Year	50.2%
> 1 Year	32.1%
Public Support	
Any Public Support	47.5%
Any VA Support	9.7%
Health Problems	
Psychiatric Problems	46.0%
Alcohol	49.2%
Drug	35.3%
Dual Diagnosis	23.0%
Medical	50.8%
Past Hospitalization	
Psychiatric	41.6%
Alcohol	53.8%
Drug	31.1%
Any MH Hosp	83.2%

PROCESS	
Mode of First Contact	
Outreach	38.4%
Came to VA	53.6%
Other	8.0%
Treatment Relationship (After three months)	
Relationship Bldg.	39.9%
Referral/Linkage	55.9%
Active Therapy	4.2%
HCMI Services	
Basic Services	41.4%
Mental Health Rx.	69.9%
Active Therapy	35.1%
Residential Treatment	34.3%
Referrals	
0	10.0%
1-2	29.7%
>2	60.3%
Number of Contacts	
1	23.8%
2-3	29.7%
4-9	16.7%
10-24	15.5%
=> 25	14.2%
Location of Contacts	
Community	48.5%
VAMC	71.0%
RTF	35.1%
Days of Res Rx (N=88)	
1-30	28.0%
31-90	40.2%
90-180	24.4%
=> 180	7.3%

OUTCOME	
Duration of Involvement	
< 3 mos.	76.2%
3-6 mos.	14.2%
6-9 mos.	2.5%
9-12 mos.	4.6%
> 12 mos.	2.5%
Termination Status*	
Too ill	3.0%
Not Interested in Rx.	42.3%
Some Involvement	35.9%
Significant Gain	9.8%
Didn't Terminate	2.6%
Other	6.4%
Last Known Residence+	
No residence/Shelter	26.1%
Residential Rx. (HCMI)	16.1%
Residential Rx. (Non-HCMI)	1.5%
Institution	3.5%
Apartment/Room	23.1%
Other	29.6%
Improvement (Among those with each problem)	
Alcohol Abuse	53.6%
Drug Abuse	54.2%
Psychosis	40.4%
Other Psychiatric Illness	56.4%
Medical Problems	65.5%
Social Skills	55.0%
Employment	56.8%
Finances	55.8%
Overall Improvement Index	
-1.0 to -0.5	26.8%
-0.5 to 0.0	22.5%
0.0 to 0.5	28.2%
0.5 to 1.0	22.5%

* Data missing on 4 veterans.
+ Data missing on 39 veterans.

TABLE A-4-4. VETERAN CHARACTERISTICS, CLINICAL PROCESS AND OUTCOME, HCMI VETERANS PROGRAM FOLLOW-UP SITES, INDIANAPOLIS (N=138)

BASELINE CHARACTERISTICS		PROCESS		OUTCOME	
Sex		Mode of First Contact		Duration of Involvement	
Male	95.7%	Outreach	36.2%	< 3 mos.	68.8%
Female	4.3%	Came to VA	18.8%	3-6 mos.	21.0%
		Other	44.9%	6-9 mos.	8.0%
Age				9-12 mos.	1.4%
< 35	22.6%	Treatment Relationship		> 12 mos.	0.7%
35-44	42.3%	(After three months)			
> 44	35.0%	Relationship Bldg.	35.8%	Termination Status*	
		Referral/Linkage	55.2%	Too ill	8.5%
Race		Active Therapy	9.0%	Not Interested in Rx.	10.9%
White	66.4%			Some Involvement	37.2%
Black	32.8%	HCMI Services		Significant Gain	25.6%
Hispanic	0.7%	Basic Services	54.7%	Didn't Terminate	0.8%
Other	0.0%	Mental Health Rx.	92.0%	Other	17.1%
		Active Therapy	29.7%		
Residence at Intake		Residential Treatment	78.8%	Last Known Residence+	
Apartment, Rm, House	20.3%			No residence/Shelter	20.9%
Shelter	50.0%			Residential Rx. (HCMI)	44.8%
No residence	29.7%	Referrals		Residential Rx. (Non-HCMI)	2.2%
		0	15.3%	Institution	8.2%
Time Homeless		1-2	43.1%	Apartment/Room	22.4%
< 1 Month	26.1%	>2	41.6%	Other	1.5%
1 Month - 1 Year	46.4%				
> 1 Year	27.5%	Number of Contacts		Improvement	
		1	12.4%	(Among those with each problem)	
Public Support		2-3	38.0%	Alcohol Abuse	53.5%
Any Public Support	30.4%	4-9	26.3%	Drug Abuse	70.7%
Any VA Support	8.7%	10-24	20.4%	Psychosis	55.0%
		=> 25	2.9%	Other Psychiatric Illness	65.0%
Health Problems				Medical Problems	75.0%
Psychiatric Problems	31.9%			Social Skills	51.8%
Alcohol	58.7%	Location of Contacts		Employment	58.0%
Drug	15.9%	Community	54.7%	Finances	61.5%
Dual Diagnosis	19.6%	VAMC	83.9%		
Medical	54.0%	RTF	73.7%	Overall Improvement Index	
				-1.0 to -0.5	13.2%
Past Hospitalization		Days of Res Rx (N=103)		-0.5 to 0.0	27.9%
Psychiatric	31.9%	1-30	34.9%	0.0 to 0.5	49.3%
Alcohol	58.7%	31-90	32.1%	0.5 to 1.0	9.6%
Drug	21.0%	90-180	22.6%		
Any MH Hosp	84.8%	=> 180	10.4%		

* Data missing on 8 veterans.
+ Data missing on 2 veterans.

TABLE A-4-5. VETERAN CHARACTERISTICS, CLINICAL PROCESS AND OUTCOME, HCMI VETERANS PROGRAM FOLLOW-UP SITES, MOUNTAIN HOME (N=133)

BASELINE CHARACTERISTICS	
Sex	
Male	98.5%
Female	1.5%
Age	
< 35	20.5%
35-44	42.4%
> 44	37.1%
Race	
White	81.1%
Black	11.4%
Hispanic	6.8%
Other	0.8%
Residence at Intake	
Apartment, Rm, House	26.1%
Shelter	21.8%
No residence	52.1%
Time Homeless	
< 1 Month	14.5%
1 Month - 1 Year	45.8%
> 1 Year	39.7%
Public Support	
Any Public Support	26.3%
Any VA Support	6.8%
Health Problems	
Psychiatric Problems	49.6%
Alcohol	71.2%
Drug	16.7%
Dual Diagnosis	72.0%
Medical	53.8%
Past Hospitalization	
Psychiatric	28.8%
Alcohol	74.2%
Drug	18.2%
Any MH Hosp	84.1%

PROCESS	
Mode of First Contact	
Outreach	22.9%
Came to VA	33.6%
Other	43.5%
Treatment Relationship (After three months)	
Relationship Bldg.	35.3%
Referral/Linkage	64.3%
Active Therapy	35.7%
0.0%	ERR
Basic Services	82.0%
Mental Health Rx.	93.2%
Active Therapy	52.6%
Residential Treatment	52.6%
Referrals	
0	2.3%
1-2	12.0%
>2	85.7%
Number of Contacts	
1	6.8%
2-3	28.8%
4-9	26.5%
10-24	30.3%
=> 25	7.6%
Location of Contacts	
Community	66.9%
VAMC	89.5%
RTF	54.9%
Days of Res Rx (N=63)	
1-30	38.6%
31-90	45.7%
90-180	12.9%
=> 180	2.9%

OUTCOME	
Duration of Involvement	
< 3 mos.	77.4%
3-6 mos.	15.8%
6-9 mos.	2.3%
9-12 mos.	1.5%
> 12 mos.	3.0%
Termination Status	
Too ill	0.0%
Not Interested in Rx.	14.6%
Some Involvement	52.0%
Significant Gain	21.1%
Didn't Terminate	3.3%
Other	8.9%
Last Known Residence*	
No residence/Shelter	13.7%
Residential Rx. (HCMI)	41.1%
Residential Rx. (Non-HCMI)	1.6%
Institution	38.7%
Apartment/Room	4.0%
Other	0.8%
Improvement	
(Among those with each problem)	
Alcohol Abuse	81.1%
Drug Abuse	78.0%
Psychosis	63.4%
Other Psychiatric Illness	65.4%
Medical Problems	87.0%
Social Skills	68.1%
Employment	39.5%
Finances	45.2%
Overall Improvement Index	
-1.0 to -0.5	10.6%
-0.5 to 0.0	25.2%
0.0 to 0.5	40.7%
0.5 to 1.0	23.6%

* Data missing on 10 veterans.
• Data missing on 9 veterans.

TABLE A-4-6. VETERAN CHARACTERISTICS, CLINICAL PROCESS AND OUTCOME, HCMI VETERANS PROGRAM FOLLOW-UP SITES, NEW ORLEANS (N=181)

BASELINE CHARACTERISTICS		PROCESS		OUTCOME	
Sex		Mode of First Contact		Duration of Involvement	
Male	99.4%	Outreach	18.9%	< 3 mos.	53.0%
Female	0.6%	Came to VA	71.1%	3-6 mos.	17.1%
		Other	10.0%	6-9 mos.	24.9%
Age				9-12 mos.	2.2%
< 35	20.4%	Treatment Relationship		> 12 mos.	2.8%
35-44	39.8%	(After three months)			
> 44	39.8%	Relationship Bldg.	46.7%	Termination Status*	
		Referral/Linkage	37.8%	Too ill	1.7%
Race		Active Therapy	15.6%	Not Interested in Rx.	23.0%
White	56.4%			Some Involvement	42.0%
Black	43.6%	HCMI Services		Significant Gain	17.8%
Hispanic	0.0%	Basic Services	48.6%	Didn't Terminate	2.9%
Other	0.0%	Mental Health Rx.	96.7%	Other	12.6%
		Active Therapy	8.3%		
Residence at Intake		Residential Treatment	55.8%	Last Known Residence+	
Apartment, Rm, House	0.6%			No residence/Shelter	23.2%
Shelter	63.1%			Residential Rx. (HCMI)	32.6%
No residence	36.3%	Referrals		Residential Rx. (Non-HCMI)	10.9%
		0	12.2%	Institution	8.0%
Time Homeless		1-2	25.4%	Apartment/Room	21.0%
< 1 Month	2.8%	>2	62.4%	Other	4.3%
1 Month - 1 Year	76.5%				
> 1 Year	20.7%	Number of Contacts		Improvement	
		1	10.5%	(Among those with each problem)	
Public Support		2-3	21.0%	Alcohol Abuse	60.2%
Any Public Support	38.7%	4-9	21.0%	Drug Abuse	60.5%
Any VA Support	5.5%	10-24	35.9%	Psychosis	30.0%
		>> 25	11.6%	Other Psychiatric	
Health Problems				Illness	50.0%
Psychiatric Problems	22.7%			Medical Problems	72.0%
Alcohol	56.9%	Location of Contacts		Social Skills	36.1%
Drug	17.1%	Community	7.7%	Employment	35.1%
Dual Diagnosis	13.8%	VAMC	98.9%	Finances	34.5%
Medical	39.8%	RTF	44.8%		
Past Hospitalization		Days of Res Rx (N=86)		Overall Improvement Index	
Psychiatric	26.1%	1-30	8.9%	-1.0 to -0.5	20.3%
Alcohol	49.2%	31-90	30.7%	-0.5 to 0.0	37.3%
Drug	22.7%	90-180	48.5%	0.0 to 0.5	35.9%
Any MH Hosp	70.0%	>> 180	11.9%	0.5 to 1.0	6.5%

* Data missing on 7 veterans.
+ Data missing on 43 veterans.

TABLE A-4-7. VETERAN CHARACTERISTICS, CLINICAL PROCESS AND OUTCOME, HCMI VETERANS PROGRAM FOLLOW-UP SITES, NEW YORK (N=324)

BASELINE CHARACTERISTICS	
Sex	
Male	98.4%
Female	1.6%
Age	
< 35	35.0%
35-44	31.6%
> 44	33.4%
Race	
White	17.8%
Black	69.5%
Hispanic	12.5%
Other	0.3%
Residence at Intake	
Apartment, Rm, House	8.5%
Shelter	67.1%
No residence	24.5%
Time Homeless	
< 1 Month	19.9%
1 Month - 1 Year	45.7%
> 1 Year	34.4%
Public Support	
Any Public Support	45.7%
Any VA Support	17.5%
Health Problems	
Psychiatric Problems	43.5%
Alcohol	55.6%
Drug	46.9%
Dual Diagnosis	34.3%
Medical	60.8%
Past Hospitalization	
Psychiatric	31.9%
Alcohol	32.4%
Drug	29.9%
Any MH Hosp	63.4%

PROCESS	
Mode of First Contact	
Outreach	64.7%
Came to VA	31.9%
Other	3.5%
Treatment Relationship (After three months)	
Relationship Bldg.	17.4%
Referral/Linkage	38.2%
Active Therapy	44.4%
HCMI Services	
Basic Services	81.2%
Mental Health Rx.	100.0%
Active Therapy	70.7%
Residential Treatment	5.6%
Referrals	
0	0.0%
1-2	12.4%
>2	87.6%
Number of Contacts	
1	39.3%
2-3	49.8%
4-9	7.2%
10-24	2.5%
=> 25	1.2%
Location of Contacts	
Community	78.2%
VAMC	72.4%
RTF	4.0%
Days of Res Rx (N=14)	
1-30	16.7%
31-90	33.3%
90-180	33.3%
=> 180	16.7%

OUTCOME	
Duration of Involvement	
< 3 mos.	90.7%
3-6 mos.	5.6%
6-9 mos.	2.8%
9-12 mos.	0.6%
> 12 mos.	0.3%
Termination Status*	
Too ill	2.3%
Not Interested in Rx.	1.6%
Some Involvement	86.1%
Significant Gain	8.7%
Didn't Terminate	0.3%
Other	1.0%
Last Known Residence	
No residence/Shelter	88.6%
Residential Rx. (HCMI)	4.0%
Residential Rx. (Non-HCMI)	0.6%
Institution	0.9%
Apartment/Room	5.9%
Other	0.0%
Improvement (Among those with each problem)	
Alcohol Abuse	78.6%
Drug Abuse	74.7%
Psychosis	75.4%
Other Psychiatric Illness	80.1%
Medical Problems	82.4%
Social Skills	41.0%
Employment	37.7%
Finances	52.3%
Overall Improvement Index	
-1.0 to -0.5	11.4%
-0.5 to 0.0	24.7%
0.0 to 0.5	43.5%
0.5 to 1.0	20.4%

* Data missing on 14 veterans.

TABLE A-4-8. VETERAN CHARACTERISTICS, CLINICAL PROCESS AND OUTCOME, HCMI VETERANS PROGRAM FOLLOW-UP SITES, SAN DIEGO (N=138)

BASELINE CHARACTERISTICS		PROCESS		OUTCOME	
Sex		Mode of First Contact		Duration of Involvement	
Male	95.6%	Outreach	9.5%	< 3 mos.	59.4%
Female	4.4%	Came to VA	31.4%	3-6 mos.	13.0%
		Other	59.1%	6-9 mos.	8.7%
Age				9-12 mos.	6.5%
< 35	36.0%	Treatment Relationship		> 12 mos.	12.3%
35-44	48.5%	(After three months)			
> 44	15.4%	Relationship Bldg.	46.3%	Termination Status*	
		Referral/Linkage	44.9%	Too ill	28.9%
Race		Active Therapy	8.8%	Not Interested in Rx.	20.0%
White	53.7%			Some Involvement	26.7%
Black	30.9%	HCMI Services		Significant Gain	11.9%
Hispanic	13.2%	Basic Services	42.8%	Didn't Terminate	12.6%
Other	2.2%	Mental Health Rx.	97.8%	Other	0.0%
		Active Therapy	65.9%		
Residence at Intake		Residential Treatment	40.6%	Last Known Residence+	
Apartment, Rm, House	8.8%			No residence/Shelter	46.3%
Shelter	41.6%			Residential Rx. (HCMI)	21.6%
No residence	49.6%	Referrals		Residential Rx. (Non-HCMI)	9.0%
		0	15.2%	Institution	0.0%
Time Homeless		1-2	22.5%	Apartment/Room	21.6%
< 1 Month	14.6%	>2	62.3%	Other	1.5%
1 Month - 1 Year	53.3%				
> 1 Year	32.1%	Number of Contacts		Improvement	
		1	17.4%	(Among those with each problem)	
Public Support		2-3	22.5%	Alcohol Abuse	25.0%
Any Public Support	47.1%	4-9	19.6%	Drug Abuse	27.7%
Any VA Support	8.8%	10-24	30.4%	Psychosis	38.6%
		=> 25	10.1%	Other Psychiatric	
Health Problems				Illness	42.7%
Psychiatric Problems	85.5%			Medical Problems	41.0%
Alcohol	60.6%	Location of Contacts		Social Skills	40.0%
Drug	47.4%	Community	15.2%	Employment	24.5%
Dual Diagnosis	65.2%	VAMC	85.5%	Finances	33.0%
Medical	69.3%	RTF	29.0%		
Past Hospitalization		Days of Res Rx (N=51)		Overall Improvement Index	
Psychiatric	69.3%	1-30	17.9%	-1.0 to -0.5	48.3%
Alcohol	42.3%	31-90	39.3%	-0.5 to 0.0	16.7%
Drug	22.6%	90-180	30.4%	0.0 to 0.5	18.3%
Any MH Hosp	81.8%	=> 180	12.5%	0.5 to 1.0	16.7%

* Data missing on 3 veterans.

+ Data missing on 4 veterans.

TABLE A-4-9. VETERAN CHARACTERISTICS, CLINICAL PROCESS AND OUTCOME, HCMI VETERANS PROGRAM FOLLOW-UP SITES, SAN FRANCISCO (N=280)

BASELINE CHARACTERISTICS		PROCESS		OUTCOME	
Sex		Mode of First Contact		Duration of Involvement	
Male	98.9%	Outreach	72.1%	< 3 mos.	55.4%
Female	1.1%	Came to VA	10.1%	3-6 mos.	13.6%
		Other	17.8%	6-9 mos.	5.0%
Age				9-12 mos.	1.4%
< 35	22.0%	Treatment Relationship		> 12 mos.	24.6%
35-44	55.2%	(After three months)			
> 44	22.7%	Relationship Bldg.	39.3%	Termination Status*	
		Referral/Linkage	51.4%	Too ill	18.0%
Race		Active Therapy	9.3%	Not Interested in Rx.	40.1%
White	46.6%			Some Involvement	10.5%
Black	43.7%	HCMI Services		Significant Gain	4.1%
Hispanic	7.2%	Basic Services	70.3%	Didn't Terminate	26.2%
Other	2.5%	Mental Health Rx.	93.4%	Other	1.1%
		Active Therapy	20.4%		
Residence at Intake		Residential Treatment	13.6%	Last Known Residence+	
Apartment, Rm, House	12.7%			No residence/Shelter	48.0%
Shelter	48.9%			Residential Rx. (HCMI)	4.5%
No residence	38.4%	Referrals		Residential Rx. (Non-HCMI)	3.4%
		0	4.4%	Institution	6.1%
Time Homeless		1-2	18.7%	Apartment/Room	36.9%
< 1 Month	19.3%	>2	76.9%	Other	1.1%
1 Month - 1 Year	44.0%				
> 1 Year	36.7%	Number of Contacts		Overall Improvement	
		1	23.3%	(Among those with each problem)	
Public Support		2-3	21.1%	Alcohol Abuse	48.0%
Any Public Support	44.3%	4-9	22.9%	Drug Abuse	46.4%
Any VA Support	10.1%	10-24	20.8%	Psychosis	52.1%
		=> 25	11.8%	Other Psychiatric	
Health Problems				Illness	47.0%
Psychiatric Problems	63.9%			Medical Problems	58.2%
Alcohol	44.9%	Location of Contacts		Social Skills	50.7%
Drug	26.0%	Community	80.3%	Employment	29.7%
Dual Diagnosis	36.2%	VAMC	58.8%	Finances	42.6%
Medical	39.7%	RTF	10.8%		
				Overall Improvement	
Past Hospitalization		Days of Res Rx (N=34)		Index	
Psychiatric	42.6%	1-30	10.5%	-1.0 to -0.5	33.1%
Alcohol	35.7%	31-90	34.2%	-0.5 to 0.0	10.8%
Drug	22.0%	90-180	55.3%	0.0 to 0.5	17.2%
Any MH Hosp		=> 180	0.0%	0.5 to 1.0	38.9%

* Data missing on 13 veterans.
+ Data missing on 101 veterans.

TABLE A-4-10. VETERAN CHARACTERISTICS, CLINICAL PROCESS AND OUTCOME, HCMI VETFRANS PROGRAM FOLLOW-UP SITES, TUSCON (N=282)

BASELINE CHARACTERISTICS		PROCESS		OUTCOME	
Sex		Mode of First Contact		Duration of Involvement	
Male	99.3%	Outreach	48.4%	< 3 mos.	79.8%
Female	0.7%	Came to VA	26.7%	3-6 mos.	6.7%
		Other	24.9%	6-9 mos.	6.4%
Age				9-12 mos.	2.8%
< 35	25.3%	Treatment Relationship		> 12 mos.	4.3%
35-44	39.1%	(After three months)			
> 44	35.6%	Relationship Bldg.	32.0%	Termination Status*	
		Referral/Linkage	65.8%	Too ill	1.9%
Race		Active Therapy	2.1%	Not Interested in Rx.	47.7%
White	82.6%			Some Involvement	28.2%
Black	12.5%	HCMI Services		Significant Gain	16.4%
Hispanic	4.3%	Basic Services	53.9%	Didn't Terminate	4.6%
Other	0.7%	Mental Health Rx.	96.5%	Other	1.1%
		Active Therapy	17.4%		
Residence at Intake		Residential Treatment	11.3%	Last Known Residence+	
Apartment, Rm, House	3.9%			No residence/Shelter	54.3%
Shelter	38.2%			Residential Rx. (HCMI)	3.5%
No residence	57.9%	Referrals		Residential Rx. (Non-HCMI)	4.3%
		0	2.1%	Institution	10.3%
Time Homeless		1-2	8.2%	Apartment/Room	27.3%
< 1 Month	41.2%	>2	89.7%	Other	0.4%
1 Month - 1 Year	33.9%				
> 1 Year	24.8%	Number of Contacts		Overall Improvement	
		1	22.4%	(Among those with each problem)	
Public Support		2-3	36.7%	Alcohol Abuse	42.6%
Any Public Support	56.0%	4-9	17.4%	Drug Abuse	41.2%
Any VA Support	15.5%	10-24	18.9%	Psychosis	36.6%
		>> 25	4.6%	Other Psychiatric	
Health Problems				Illness	50.5%
Psychiatric	54.3%			Medical Problems	71.6%
Alcohol	66.5%	Location of Contacts		Social Skills	16.2%
Drug	24.6%	Community	80.5%	Employment	36.4%
Dual Diagnosis	38.3%	VAMC	85.1%	Finances	51.0%
Medical	64.5%	RTF	9.6%		
Past Hospitalization		Days of Res Rx (N=30)		Overall Improvement Index	
Psychiatric	38.7%	1-30	43.8%	-1.0 to -0.5	38.3%
Alcohol	53.2%	31-90	37.5%	-0.5 to 0.0	23.9%
Drug	15.7%	90-180	15.6%	0.0 to 0.5	11.2%
Any MH Hosp	73.2%	>> 180	3.1%	0.5 to 1.0	28.6%

* Data missing on 19 veterans.
\+ Data missing on 39 veterans.

Appendix B:

Supplemental Studies of the HCMI Veterans Program

1. Community-Based Mental Health Care: Assessing Diversity in Clinical Practice by Robert Rosenheck MD, Michael Neale MA and Peggy Gallup PhD;

2. Health Service Utilization Among Homeless Veterans by Peggy Gallup PhD and Robert Rosenheck MD.

3. Women in the HCMI Program: A New Subgroup of the Homeless Veteran Population by Catherine Leda MSN MPH, Robert Rosenheck MD and Peggy Gallup PhD.

4. VA Outpatient Service Utilization Among Veterans Assessed by the HCMI Veterans Program: An Analysis of Data from the VA Outpatient File.

Community-Based Mental Health Care: Assessing Diversity in Clinical Practice

by
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and Peggy Gallup PhD *

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Abstract

The delivery of community-based mental health care was compared in two multi-site Department of Veterans Affairs (VA) demonstration programs: an outreach program for homeless mentally ill veterans and an intensive case management program for high hospital users. Comparisons were made using both periodic patient-specific progress summaries and a one-time clinician-completed questionnaire, Jerrell and Hargreaves' Community Program Philosophy Scale (CPPS). CPPS scores were consistent with data from patient specific progress summaries on 7 of 20 subscales (substance abuse treatment, vocational emphasis, interest in CMI patients, family treatment, emergency services, medication and longitudinal focus) and inconsistent on three subscales (outreach orientation, referral advocacy and de-emphasis of psychotherapy). The CPPS appears to be an efficient tool for characterizing the overall emphases of community-based mental health programs. The homeless outreach program was shown to have a higher turnover rate and to focus primarily on initiating treatment for underserved substance abusers, while the intensive case management program demonstrated longer term community support to more hospital dependent, disabled patients. This study reveals a greater diversity in the operation of community-based mental health programs than has previously been recognized and suggests that community-based mental health care may prove to be increasingly diverse and complex as it is applied to different clinical populations.

For over two decades, individualized, intensive community psychiatric care has been regarded as the treatment of choice for refractory patients suffering from persistent and disabling mental illness. Whether referred to as psychiatric home care (1), community support (2) or intensive case management (3), community-based clinical initiatives have been designed to provide *in vivo* treatment and social support for patients with a multiplicity of medical-psychiatric and psycho-social problems. During the 1980s, community mental health experts also suggested that such programs might be effective in engaging the homeless mentally ill in treatment, and in helping them move away from life on the streets (4).

Describing and quantifying the specific services provided by community-based programs has emerged, more recently, as one of the major challenges confronting both program managers and researchers. Although well-designed outcome studies have examined the effectiveness of specialized community treatment programs (1,3,5-6), methods for describing the services they provide have been presented in only a few studies (7-8). There is now considerable interest, for purposes of both program monitoring and outcome research, in developing accurate but economical methods for describing the work of these programs (9-10).

Three approaches to monitoring the process of community treatment can be distinguished that differ in their methodologic precision and in the resources they require. The first method, "unit of service accounting", begins with a developmental phase in which each treatment element or unit of service provided by a program is identified. This phase is followed by a data gathering phase in which the frequency and duration of each type of service provided to each individual patient is counted over a specified time span (8). Although this method provides highly accurate and detailed data it: 1) is costly to develop, 2) places significant time demands on clinicians and 3) requires close monitoring to assure complete and accurate data collection.

In a second approach, structured clinical progress summaries are used to monitor critical features of the care provided to individual patients. Using either abstracts from standard medical records (7) or data provided by clinicians through questionnaires (11), information is obtained on the volume and type of services delivered, as well as on the nature of treatment relationships. Although less precise than the unit of service accounting method, structured clinical progress summaries provide moderately detailed, patient specific data. Like unit of service accounting, however, this approach also requires substantial effort, either to abstract data from medical records or from clinicians who must complete the questionnaires and data managers who must assure that data collection procedures are followed.

A highly economical alternative has been proposed recently

by Jerrell and Hargreaves (12), involving the assessment of program operation through a one-time clinician questionnaire, the Community Program Philosophy Scale (CPPS). This questionnaire records neither the delivery of specific services nor the course of treatment for individual patients. Rather, it measures program-wide values and emphases as perceived by the clinicians providing services. While its major advantage is economy, its principal shortcoming is that it relies exclusively on clinician impressions and judgments to characterize service delivery. In view of the simplicity and economy of the approach represented by the CPPS, this study set out to explore the relationship between clinician judgments on the CPPS and patient specific measures recorded on clinical process questionnaires in two multi-site Department of Veterans Affairs (VA) programs.

The first of these programs, the Homeless Chronically Mentally Ill (HCMI) Veterans program, is a community outreach program directed at engaging homeless chronically mentally ill veterans in treatment and offering them time-limited residential treatment and case management. The second program, the Intensive Psychiatric Community Care (IPCC) program, provides intensive case management services to high consumers of inpatient psychiatric services. These programs serve quite different patient populations, have different goals, and provide different configurations of services. They thus offer a potentially useful test of the CPPS' ability to differentiate contrasting community mental health programs.

The goals of the paper are both methodological and substantive. Methodologically, we examine the ability of the CPPS to discern differences in the operation of two multi-site community-based programs. Substantively, we explore differences between community-based case management programs that target contrasting subgroups of the severely and persistently mentally ill. We thereby hope to contribute to the general understanding of the diversity of clinical process entailed in community-based psychiatric care.

Methods

Programs and Patient Samples.

The HCMI Veterans program, established in 1987 at 43 VA medical centers (13), was designed to provide four key services to homeless chronically mentally ill veterans: 1) outreach to engage as many homeless veterans as possible in treatment; 2) linkage with VA and non-VA psychiatric and medical services; 3) residential treatment for up to six months, provided through special contracts with non-VA providers; and 4) continuing case management. Nine of the 43 sites participated in a longitudinal program evaluation (Rosenheck and Gallup, in press) in which clinical process questionnaires were completed every three months, on a sample of 1,795 consecutive intakes, for up to one

year.

The VA Intensive Psychiatric Community Care (IPCC) program was also initiated in 1987, at 9 sites, to provide intensive services to high hospital users currently admitted to psychiatric inpatient units. Services provided by IPCC teams are characterized by: 1) high intensity and flexibility (patients are seen as frequently as necessary, usually in community settings); 2) continuity of care (patients are assigned to IPCC teams with the expectation that they will be the responsibility of the team for the foreseeable future); 3) a practical problem solving orientation (services are designed to maximize skill acquisition and community adjustment); and 4) low case loads (5-15 patients per clinician). As part of the evaluation of the IPCC program, clinicians complete clinical process questionnaires on their work with each veteran, at six month intervals. Questionnaires on 249 participants are available for both the first six months and the first year of treatment.

Measures

Demographic data and clinical diagnoses were gathered on participants in both programs at the time of program entry. Clinical process data are available on: 1) the number of new veterans contacted per clinician per year, 2) the duration of program involvement, 3) reasons for termination, 4) the primary nature of the treatment relationship, 5) the provision of specific services (psychotherapy, rehabilitation activities, crisis intervention and family treatment) and 6) frequency of contact.

The CPPS (12) is an 80-item questionnaire, completed by clinicians, that yields scores on 20 subscales designed to characterize the clinical work of community oriented psychiatric programs. Administration of the CPPS to 158 clinicians in 12 California programs during its development revealed subscale Cronbach alphas ranging from 0.50 to 0.82 with an average alpha of 0.70 (12). Alphas from administration of the CPPS to 175 VA clinicians for this study resulted in somewhat lower subscale alphas, ranging from 0.28 to 0.79, with an average of 0.58. The CPPS was completed by 26 clinicians at the nine HCMI follow-up sites and by 51 clinicians at the nine IPCC sites.

Categorical data from the two programs were compared using the chi square test. T-tests were used to compare CPPS scores.

Results

Veteran Characteristics

Compared to IPCC veterans, those in the HCMI program were younger, more often black, more likely to have substance abuse disorders and less likely to suffer from schizophrenia (Table 1). While only 39% of HCMI veterans had been hospitalized for a

psychiatric disorder and 11% received VA disability payments, all of the IPPC veterans had been hospitalized (and were hospitalized at the time of program entry) and 54% received VA disability payments.

Number of Veterans Assisted, Duration of Involvement and Termination

On average each HCMI clinician saw 73 new veterans per year as compared to only 11 in IPCC. Although larger numbers of veterans were seen in the HCMI program, patient turnover was also considerably more rapid. Only 25% of those assessed at intake were still involved in the program after three months; 12% at 6 months; and 7% at one year (Table 2). In contrast, 96% of IPCC veterans were still involved after six months and 87% at one year.

Among veterans who terminated from the HCMI program during the first twelve months, 40% were reported by their primary clinicians to have achieved at least limited clinical goals while 26% were not interested in treatment or had moved away (Table 2). In contrast, among the small number of veterans who terminated from the IPCC program, almost three times as many (65%) did so because of a lack of interest in the program or because they moved elsewhere, and only 4% were thought to have achieved limited goals.

Treatment Relationship and Specific Services

Clinicians' primary characterizations of treatment relationships in the two programs were significantly different after six months, but not after one year (Table 3). At six months, among the 17% of patients who remained involved in the HCMI program, the primary emphasis (60%) was on making linkages with other providers and monitoring the status of those linkages. In the IPCC program the greatest emphasis was on relationship building and support. Neither psychotherapy nor rehabilitation was the primary emphasis for a large proportion of participants in either program. After 12 months, treatment relationships with the 173 veterans who were still involved with the HCMI program were generally similar to those in the IPCC program (Table 4).

At both 6 and 12 months IPCC veterans were significantly more likely to have received some psychotherapeutic services, rehabilitation and crisis intervention assistance, and family treatment. Furthermore, only 17% of HCMI veterans were seen weekly at 6 months and 8% at one year, as compared to 61% seen weekly at 6 months and 57% at one year in the IPCC program.

Clinician progress reports thus portray significant contrasts in patient populations and in the clinical operation of the two programs. The HCMI program is characterized by contact with substantial numbers of veterans who are less often disabled and more likely to have substance abuse problems. Its emphasis is

on time-limited involvement and linkage with residential treatment facilities and other services. The IPCC program, in contrast, emphasizes sustained involvement with patients who more frequently carry psychotic diagnoses and who appear to be more severely disabled and institutionally dependent.

CPPS Scores

CPPS scores from the two programs were significantly different on 11 of 20 subscales (Table 4). Most of the differences reflect the contrasting patterns of service delivery, noted above. HCMI program staff recorded higher scores on substance abuse treatment and vocational emphasis, while IPCC clinicians scored higher on interest in CMI patients, family treatment, emergency services, medication and longitudinal focus. One additional difference involved a non-specific program characteristic, with the HCMI program scoring higher than IPCC on staff involvement.

Findings on three subscales did not appear to be consistent with program descriptions and/or data from the clinical progress questionnaires. On these subscales, outreach orientation, referral advocacy and de-emphasis of psychotherapy, the IPCC program scored higher than the HCMI program. Additional information from the questionnaires and examination of specific CPPS subscale items can help to clarify these apparent inconsistencies.

Although 44% of HCMI program veterans and no IPCC veterans, were initially contacted through community outreach items included in the outreach subscale emphasize the location of ongoing contacts and not the way in which contact was initiated. Most HCMI treatment beyond the initial contact was office based. At the end of three months, for example, only 27% of HCMI veterans had most of their contacts with the program in community settings as compared to 45% of IPCC veterans.

While HCMI clinicians reported that treatment was focused on making and monitoring linkages or referrals for a majority of cases (direct transportation services were provided to 48% of veterans), referral advocacy on the CPPS specifically focuses on whether staff literally accompany clients to other providers or whether they allow clients to follow through on referrals independently. Higher functioning, less often disabled, substance abuse patients seen in the HCMI program are more likely to have been given eventual responsibility for following through with referrals on their own.

The greater frequency of psychotherapy reported in the IPCC program also appears to contradict the higher CPPS scores on de-emphasis of psychotherapy. It is important to note, however, that CPPS items address the relative value placed on psychotherapy, and not its absolute presence or absence. Thus, while IPCC

clinicians reported (on the clinical progress questionnaires) that many veterans received some psychotherapeutic services, they may still have felt that psychotherapy was less important than other treatment activities.

On these three subscales therefore, differences between programs on the CPPS did not unambiguously reflect variability in program operation reported on patient-specific questionnaires; additional information was needed to clarify their interpretation.

Discussion

In this study, CPPS scores successfully identified important distinctions between two community-based programs that are substantially different in their clinical operation, a notable accomplishment in view of the instrument's economy and ease of administration. Statistically significant differences were observed for over half of the 20 CPPS subscales and, for seven subscales, the observed differences were consistent with patient-specific data obtained through periodic clinical process questionnaires. Three subscales, however, yielded results that conflicted with patient-specific questionnaire data and additional information was needed to clarify the meaning of these discrepancies.

It is noteworthy that CPPS subscales for which significant differences were found primarily reflect variation in patient characteristics, rather than in overall clinical philosophy or service delivery. CPPS scores correctly indicated that a greater proportion of HCMI patients were substance abusers and that fewer were disabled, and that IPCC patients tended to be chronically ill, to have families who were still involved in their lives, and to suffer from disorders requiring medication. Only the differences, detected by the CPPS, in providing emergency services and longitudinal care, seemed to reflect divergence in overall program philosophy that could be considered independent of patient characteristics. Three other dimensions (outreach emphasis, referral-advocacy, and de-emphasis of psychotherapy), which one might expect to be closely related to program philosophy, were not clearly delineated by the CPPS. The CPPS thus appears to be more effective in identifying program differences that are attributable to discrete patient characteristics rather than overarching clinical philosophy or program implementation. More precise evaluation of the operation of community-based mental health programs would appear to require patient specific progress reports or quantitative data on delivery of specific services.

Together, data from the CPPS and from clinical progress questionnaires highlight several differences between outreach-case management programs for the homeless and intensive case

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management programs for the institutionally dependent. While the two programs share emphases on community-based relationship building and on linkage, advocacy, and follow-up case management, they are clearly distinct in other respects, due in large measure to the divergent needs of the patients they serve. Not surprisingly, homeless outreach programs tend to focus on initiating involvement of the underserved in treatment while intensive case management programs seek to provide long-term community support as an alternative to institutional care.

While this study demonstrates strengths and limitations of clinician-completed questionnaires for characterizing community mental health programs, it also recasts long-standing questions concerning the nature of community-based case management services (14,15) in terms of their operational diversity and their response to particular clients and needs. As case management models continue to evolve and to be disseminated, further efforts to explore program definition and operation appear warranted, particularly with respect to delivery of services to unique client groups. Indeed, the work of community-based mental health care may prove to be increasingly diverse and complex as it is applied to disparate clinical populations.

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TABLE 1. COMPARISON OF HCMI VETERANS PROGRAM AND INTENSIVE PSYCHIATRIC COMMUNITY CARE PROGRAM: PATIENT CHARACTERISTICS

	HCMI Program (N=1,795)	IPCC (N=249)	CHI SQ.	Signif.
Age			65.8	0.0000
< 35	29%	17%		
35-44	42%	28%		
> 44	29%	55%		
Male	98%	96%	4.6	0.0312
Race			57.0	0.0000
White	55%	80%		
Black	37%	14%		
Other	8%	6%		
Domicile at Program Entry			1203.2	0.0000
Apartment, room or house	11%	0%		
VA Medical Center	9%	100%		
No residence/shelter	87%	0%		
Clinical Diagnosis (a)				
Schizophrenia/Schizo-affect.	13%	49%	170.7	0.0000
Affective/Bipolar	15%	21%	4.4	0.0352
Alcohol Abuse/Depend.	52%	6%	166.7	0.0000
Drug Abuse/Depend.	31%	2%	88.4	0.0000
Past Psychiatric Hosp.	39%	100%	324.7	0.0000
VA Disability	11%	54%	286.7	0.0000

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a - formal clinical diagnoses available on 1,068 veterans.

TABLE 2. COMPARISON OF HCMI VETERANS PROGRAM AND IPCC PROGRAM:DURATION OF INVOLVEMENT AND REASON FOR TERMINATION

	HCMI Program (N=1,795)	IPCC (N=249)	CHI SQ.	Signif.
Percent Still Involved				
At 3 months	25%	N/A		
At 6 months	12%	96%	1019.2	0.0000
At 9 months	7%	N/A		
At 12 months	7%	87%	1296.3	0.0000
Reason for Termination*			20.55	0.0013
No interest/moved away	26%	65%		
Too ill to participate	24%	17%		
Achieved some goals	40%	4%		
Other	10%	13%		
Total	100%	100%		

N/A = Data not available
* Termination N = 1,669 (HCMI); 23 (IPCC)

TABLE 3. COMPARISON OF HCMI VETERANS PROGRAM AND IPCC PROGRAM: PARTICIPATION 6 AND 12 MONTHS AFTER ENTRY.

	HCMI Program	IPCC	CHI SQ.	Signif.
Treatment Relationship				
With Participants at 6 Mos. (a)			40.8	0.0000
Relationship Bldg/Support	26%	45%		
Making/Monitoring Linkages	60%	36%		
Psychotherapy	7%	14%		
Rehabilitation	7%	5%		
Total	100%	100%		
With Participants at 12 Mos. (b)			7.52	0.0568
Relationship Bldg/Support	50%	44%		
Making/Monitoring Linkages	41%	40%		
Psychotherapy	5%	13%		
Rehabilitation	5%	4%		
Total	100%	100%		
Services Provided				
To Participants at 6 Mos. (a)				
Psychotherapy	21%	60%	107.5	0.0000
Rehabilitation	35%	50%	14.6	0.0001
Crisis Intervention	35%	44%	4.9	0.0260
Family Treatment	5%	50%	192.2	0.0000
To Participants at 12 Mos. (b)				
Psychotherapy	9%	58%	113.2	0.0000
Rehabilitation	19%	45%	31.1	0.0000
Crisis Intervention	21%	45%	24.1	0.0000
Family Treatment	6%	49%	82.7	0.0000
Frequency of Contact (patients seen => weekly)				
Participants at 6 Mos. (a)	17%	61%	132.3	0.0000
Participants at 12 Mos. (b)	8%	57%	97.4	0.0000

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a) N = 480 (HCMI); 239 (MHI).
b) N = 173 (HCMI); 215 (MHI).

TABLE 4. Community Program Philosophy Scale Scores: HCMI and IPCC Programs.

Subscale	HCMI (N=26)	IPCC (N=51)	HCMI-IPCC	T VALUE	
Innovativeness	15.8	15.8	0.0	-0.05	
Staff Involvement	18.0	16.9	1.1	2.37	*
Program Clarity	15.6	14.9	0.7	1.11	
Staff Cohesion	17.1	16.7	0.4	0.61	
Supervisory Support	15.0	15.7	-0.7	-1.02	
Outreach Oriented	15.7	17.2	-1.5	2.49	*
Team Model	13.7	13.4	0.3	0.35	
Housing Assistance	16.3	17.0	-0.7	-1.34	
Interest in CMI Patients	15.3	16.7	-1.4	-2.68	**
Family Treatment	12.0	16.4	-4.4	-6.65	***
Substacne Abuse Treatment	18.4	14.7	3.7	7.24	***
Link to Entitlements	16.0	17.0	-1.0	-1.84	
Emergency Services	11.0	13.3	-2.3	-3.18	***
Referral Advocacy	14.2	16.3	-2.1	-3.05	***
Interagency Orientation	16.0	15.9	0.1	0.17	
Empowerment Philosophy	16.5	16.8	-0.3	-0.84	
Vocational Emphasis	15.8	14.1	1.7	3.92	***
De-emphasizes psychotherapy	13.5	15.0	-1.5	-2.14	**
Medication	15.8	17.6	-1.8	-3.88	***
Longitudinal Focus	14.0	17.6	-3.6	-6.04	***

* $p < .05$
** $p < .05$
*** $p < .05$

Health Service Use Among Homeless Chronically Mentally Ill Veterans

Poster presentation at the 144th Annual Meeting of the American Psychiatric Association, New Orleans, LA, May 14, 1991.

Introduction/Methods

Previous studies have suggested that the homeless mentally have insufficient access to mental health services. In 1987 the VA established a 43-site outreach program for homeless chronically mentally ill veterans. This study used structured clinical assessment and psychiatric service utilization data on 2,981 homeless veterans to identify rates and determinants of health service use in this population.

Results

Veterans seen by the HCMI veterans program were similar in their socio-demographic characteristics to homeless males identified in other studies and surveys. Clinical diagnoses reveal a high proportion of substance abuse disorders and moderate prevalence of schizophrenia and affective disorder (Table 1).

Altogether 35% of these veterans had at least one psychiatric outpatient visit during the previous 6 months (mean=9.2 visits) and 26.8% had had a psychiatric hospitalization (Table 2). Use of all services was relatively high in this clinical sample.

Multivariate (logistic regression) analysis was used to determine adjusted odds ratios of service use in the presence of various patient characteristics. These analyses showed all types of health service utilization, including mental health use, were positively associated with severity of psychiatric symptomatology, medical problems, educational level and VA financial support (Table 3-4). Substance abuse problems were associated with use of self-help groups (Alcoholics Anonymous or Narcotics Anonymous) but not with use of other types of service. Most types of health service use, including mental health service use, were negatively associated with having spent the past 30 days living in the street or in shelters. Past involvement in the criminal justice system was also positively associated with some types of service use.

Conclusions

Although based on a clinical sample, these results are consistent with those from a community study of the homeless. Homeless chronically mentally ill veterans with more severe psychiatric symptomatology are more likely to obtain mental health services. The most destitute of these veterans appear to be either less motivated to seek help or to face greater barriers in accessing services. These data support the importance of aggressive

community outreach in providing mental health services to the homeless mentally ill.

TABLE 1

VETERANS ASSESSED IN THE HCMI VETERANS PROGRAM
PSYCHIATRIC DIAGNOSES

NO AXIS I DIAGNOSIS	7.5%
ALCOHOL ABUSE/DEPENDENCE	55.2%
DRUG ABUSE/DEPENDENCE	18.4%
SCHIZOPHRENIA	12.3%
POST TRAUMATIC STRESS DISORDER	9.3%
AFFECTIVE DISORDER	9.3%
ADJUSTMENT DISORDER	8.1%
BIPOLAR DISORDER	4.7%
SUBSTANCE ABUSE INDUCED OBS	3.2%
ANXIETY DISORDER	2.3%
ORGANIC BRAIN DISORDER	2.2%
OTHER PSYCHOSIS	2.0%
AXIS II DIAGNOSES	18.3%
AXIS I or AXIS II DIAGNOSIS	97.3%

TABLE 2

VETERANS ASSESSED IN THE HCMI VETERANS PROGRAM
HEALTH SERVICE USE

LIFETIME	
PSYCHIATRIC HOSPITALIZATION	36.3%
ALCOHOL HOSPITALIZATION	47.7%
DRUG HOSPITALIZATION	18.4%
PAST 6 MONTHS	
ANY HEALTH SERVICE USE	77.3%
INPATIENT	45.4%
OUTPATIENT	68.1%
MENTAL HEALTH OUTPATIENT	35.2%
PSYCHIATRIC INPATIENT	26.8%
MED/SURG INPATIENT	16.6%
ANY EMERGENCY ROOM	36.0%
SELF-HELP (e.g. AA or NA)	25.6%
ANY VA SERVICES	61.8%
ANY NON-VA SERVICES	43.9%
VA MENTAL HEALTH OPT.	27.0%
VA PSYCH. INPATIENT OR OUTPT.	35.8%
VA OUTPATIENT PSYCH.	26.9%
VA INPATIENT PSYCH.	28.7%
VA EMERGENCY ROOM	24.0%
WEEKLY OUTPATIENT PSYCH.	3.5%

TABLE 3

LOGISTIC REGRESSION MODELS (ADJUSTED ODDS RATIOS) OF HEALTH SERVICE USE AMONG HOMELESS CHRONICALLY MENTALLY ILL VETERANS: GENERAL SERVICES

	ANY HLTH SERVICE	ANY INPATIENT	ANY OUTPT.	PSYCH. OUTPT.	PSYCH. INPATIENT	ANY E.R.	SELF-HELP (AA/NA)
PERCENT USING SERVICE	77%	45%	68%	35%	33%	36%	26%
R-square of model	8%	6%	5%	9%	8%	4%	5%
AGE (deciles)	1.12			0.83	1.25	1.23	1.31
WHITE						1.33	
HISPANIC	0.66	0.74	0.76				0.84
CONTACTED THROUGH OUTREACH	0.64	0.84	0.79	0.77	0.82		
LIVING ON STREET	0.64	0.55		0.69	0.51		0.7
VA BENEFITS	1.66	1.30	1.53	1.77	1.49		
HIGH SCHOOL EDUCATION	1.23			1.24		1.15	1.15
CRIMINAL HISTORY	1.14	1.07	1.13	1.05	1.06		
PSYCHIATRIC SYMPTOMS (ASI)	6.29	4.52	3.15	11.32	6.25	3.09	3.97
ALCOHOL ABUSE (ASI)							
DRUG ABUSE (ASI)					1.22	1.71	0.78
MEDICAL PROBLEMS	1.73	1.27	1.71				

Odds ratios are all significant at $p < .05$.

TABLE 4

LOGISTIC REGRESSION MODELS (ADJUSTED ODDS RATIOS) OF HEALTH SERVICE USE AMONG HOMELESS CHRONICALLY MENTALLY ILL VETERANS: VA SERVICES

PERCENT USING SERVICE	ANY VA SERVICES 62%	ANY NON-VA SERVICES 44%	VA PSY:IP/OP 43%	VA PSYCH INPATIENT 29%	VA PSYCH OUT PT. 27%	VA E.R. 24%	WEEKLY PSYCH.OP. 4%
R-square of model	10%	4%	13%	8%	10%	4%	2%
AGE (deciles)	1.09						
WHITE			0.85	0.91	0.84		
HISPANIC			1.33	1.27	1.27	1.31	
		0.68	1.46		1.61		
CONTACTED THROUGH OUTREACH	0.65						
LIVING ON STREET	0.58		0.63		0.66		
			0.51	0.47	0.65	1.23	
VA BENEFITS	2.41	0.79					
HIGH SCHOOL EDUCATION	1.44		2.25	1.67	2.27	1.67	2.03
CRIMINAL HISTORY		1.19	1.42	1.31	1.33		
						1.07	1.15
PSYCHIATRIC SYMPTOMS (ASI)	6.30	2.10	10.98	6.66	12.51	2.44	19.79
ALCOHOL ABUSE (ASI)		1.24			0.75		0.34
DRUG ABUSE (ASI)							
MEDICAL PROBLEMS	1.43	1.57		0.83		1.61	

Odds ratios are all significant at $p < .05$.

Women in the HCMI Program:
A New Subgroup of the Homeless Veteran Population

Paper presented at the 144th Annual Meeting of the American Psychiatric Association, New Orleans, LA, May 15, 1991

Women have always been a relatively small part of this country's military, and also a relatively small segment of America's homeless population. However, more and more women are now in our armed forces, and greater numbers of women are joining the ranks of this nation's homeless as well. The percent of female veterans in this country has increased in the last 15 years and is anticipated to increase more in the future. Among veterans who served in the military before 1975, 2.2% are female while among veterans who served since 1975, 7.1% are females (DVA, Survey of Veterans, 1987). The proportion of women in America's homeless population is also growing. Prior to 1970, women constituted less than 5% of the homeless (Rossi, 1989). Today women make up approximately 20% of the adult homeless population (Rossi, 1989). Because of both the changing demographics of our armed forces and of this country's homeless population, one can expect, sadly, that in the years to come we will be seeing even more homeless female veterans in our communities.

Over a 2 1/2 year period, from March 1988 to January 1991, the HCMI Program has seen 310 women. These 310 women represent 1.6% of the homeless veterans seen by the Program during this time period. Using data collected in the monitoring component of the HCMI Program, we can now report preliminary findings on this subgroup of the homeless. Questions arise about this new subgroup in the areas of homelessness, gender and veteran status. More specifically:

Homelessness
: Are there sociodemographic differences between homeless female veterans and <u>non-homeless</u> female veterans?;

Gender
: Are there sociodemographic, residential and psychiatric differences between homeless female veterans and homeless <u>male</u> veterans?, and;

Veteran Status
: Are there sociodemographic and psychiatric differences between homeless female veterans and homeless female <u>non-veterans</u>?

A. Homelessness

In order to examine sociodemographic differences between homeless and non-homeless female veterans, comparisons were made between the 310 HCMI females and 660,921 non-homeless female veterans from VA's Survey of Veterans III (SOVIII) (1987). SOVIII is a national probability sample survey conducted in 1987 by the

Census Bureau for VA in order to analyze the current state of the veteran population. Table 1 reports the results of these comparisons[1]. Compared to non-homeless females in the general veteran population, HCMI females are younger. Over one-third (36%) of females in the HCMI Program are less than 35 years of age compared to 14% of females in the general veteran population. HCMI females are also more likely to be single (92% in HCMI Program vs 44% in general veteran population) and more likely to be a member of a minority group (49% vs 11%). Women in the HCMI Program are significantly less likely to be employed. Only 18% of HCMI women were employed in either part- or full-time jobs compared to almost half of the women in SOVIII (46%).

B. Gender

To examine gender differences, comparisons were made between the 310 female veterans and 19,003 homeless males who also received services in the HCMI Program from March 1988 to January 1990[2]. Table 2 indicates that, compared to males in the HCMI Program, HCMI females are younger, more often married, and less likely to be employed in part- or full-time employment. Although there were differences between these two groups in regard to age, marital status and employment status, no significant differences were found for race, income and use of VA health care services in the 6 months before contact with the HCMI Program.

The residential histories of these homeless women, as compared to their male counterparts are quite different. Data presented in Table 3 report that women in the HCMI Program are significantly more likely to be doubling up and living with family and friends and less likely to be using the shelter system. Fourteen percent fewer HCMI women (63%) are sleeping outdoors or in a shelter for the homeless as compared to the proportion found in HCMI men (77%). Women in the Program also appear to have shorter durations of homelessness. One-third of women (34%), as compared to one-quarter (25%) of the men reported that they had been homeless for less than a month prior to contact with the HCMI Program.

So how do women in the HCMI Program differ from their male counterparts in the prevalence of substance abuse disorders? Table 4 reports that the proportion of women with alcohol or drug abuse/dependencies is lower than the proportion found in HCMI males. This difference is particularly greater for alcohol abuse where 64% of men have a problem with alcohol and only slightly over one-third of the HCMI women (35%) were identified as having a

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[1] 95% confidence intervals were calculated for the expected difference in the proportions for these two samples.

[2] Chi square test were performed to evaluate differences between males and females at the .05 level of significance.

problem.

Table 5 shows non-substance abuse psychiatric illnesses. Overall, there is a significantly greater proportion of serious psychiatric illnesses among women in the HCMI Program as compared to HCMI men. Over half of HCMI women (52%) in contrast to 41% of HCMI men were diagnosed as having a serious mental illness. Serious mental illness is defined as any homeless veteran who has been given a psychiatric diagnosis that falls into one of the following categories: schizophrenia, psychotic disorders other than schizophrenia, mood disorders and/or posttraumatic stress disorder (PTSD). Although women were more likely to have a serious psychiatric illness, because their prevalence of substance abuse disorders is lower than HCMI men, they were less likely to be dually diagnosed. When individual psychiatric diagnostic categories are examined, women are significantly more likely than their male counterparts to have mood disorders (35% in women vs 23% in men) and schizophrenia (17% vs 12%). Since women historically have not been exposed to combat during their military service, it is not surprising that they have a significantly lower prevalence of PTSD (1% in women vs 10% in men).

C. Veteran Status

The last area of exploration is whether there are differences between homeless female veterans and non-veteran homeless females. For this comparison, data on non-veteran homeless females (n=78) was obtained from Breakey et al's (1989) Baltimore homeless study. Unlike the data collected on the women in the HCMI Program, which is a clinical sample, Breakey and colleagues randomly sampled and collected information on Baltimore women who were living in shelters, missions or the jail system[3].

HCMI women are very similar to other homeless women in regard to the proportion who belong to a minority group and the proportion who are currently married, however, HCMI women are, on average, 6 years older. Homeless female veterans and homeless female non-veterans are remarkably similar in their prevalences of alcohol abuse, drug abuse and major mental illnesses, particularly schizophrenia as no statistically significant differences were found between the two groups(Table 6). Approximately half of HCMI women (52%) and half of the Baltimore women (49%) were diagnosed as having major mental illnesses and exactly 17% in both groups have schizophrenia.

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[3] Again, 95% confidence intervals were calculated for the expected difference between the proportions for these two groups on selected demographic and psychiatric variables.

D. Summary

In summary, homeless females do exist and they are a potentially growing subgroup of the homeless veteran population. Compared to their non-homeless female veteran counterparts, HCMI women are younger, more likely to be single, less likely to be employed and more likely to be a member of a minority group. Compared to their homeless male veteran counterparts, our data suggest that they are significantly more likely to be suffering from a serious psychiatric illness and particularly less likely to be abusing alcohol or drugs. On the other hand, as a group, homeless female veterans are very much like other homeless women in the prevalence of serious psychiatric illnesses and substance abuse problems.

As a nation, and as a group of health care providers in the field of mental health, we need to anticipate the growth of this subgroup of the homeless veteran population and to remember that as veterans these women are entitled to not only inpatient and outpatient psychiatric services but to an array of health care services and financial benefits through the Department of Veterans Affairs.

Table 1. Sociodemographic Comparisons with Non-Homeless Female Veterans.

	HCMI FEMALES n=306	FEMALE VETERANS VA SOV# n=660,921	
< 35 yrs	36% (110)	14% (141,288)	*
Single	92% (280)	44% (289,139)	*
Minority	49% (150)	11% (63,812)	*
Employed (full or part-time)	18% (56)	46% (300,767)	*

Department of Veterans Affairs, Survey of Veterans, 1987.

* p<.05 for differences between proportions

Table 2. Sociodemographic Comparisons with Homeless Male Veterans.

	HCMI FEMALES n=306	HCMI MEN n=19,003	
< 35 yrs	36% (110)	22% (4,123)	*
Married	8% (26)	4% (815)	*
Employed (full or part-time)	19% (56)	27% (5,031)	*

* p<.05 Chi Square

Table 3. Residential Comparisons with Homeless Male Veterans.

	HCMI FEMALES n=306	HCMI MEN n=19,003	
Living with family or friends	16% (49)	11% (1,992)	*
Shelter/no residence	63% (196)	77% (14,693)	*
Homeless < 1 month	34% (105)	25% (4,758)	*

* p<.05 Chi Square

Table 4. Substance Abuse Status Comparisons with Homeless Male Veterans.

	HCMI FEMALES n=306	HCMI MEN n=19,003	
ETOH abuse	35% (109)	64% (12,080)	*
Drug abuse	24% (74)	33% (6,191)	*
Any substance abuse	43% (132)	72% (13,659)	*

* p<.05 Chi Square

Table 5. Psychopathologic Features Comparisons with Homeless Male Veterans.

	HCMI FEMALES n=306	HCMI MEN n=19,003
Serious psychiatric illness	52% (161)	41% (7,750) *
MICA	18% (57)	27% (5,094) *
Schizophrenia	17% (52)	12% (2,327) *
Other psychotic disorder	10% (31)	7% (1,282)
Mood disorder	35% (108)	23% (4,304) *
PTSD from combat	1% (4)	10% (1,931) *

* p<.05 Chi Square

Table 6. Psychopathologic Features Comparisons with Non-Veteran Homeless Female.

	HCMI FEMALES n=306	BALTIMORE WOMEN# n=78
ETOH abuse	35% (109)	32% (25)
Drug abuse	24% (74)	17% (13)
Any substance abuse	43% (132)	38% (30)
Major mental illness	52% (161)	49% (38)
Schizophrenia	17% (52)	17% (13)

Breakey et al, Health and mental health problems of homeless men and women in Baltimore, JAMA, 1989, 262:10, 1352-1357.

* p<.05 for differences between proportions

VA Outpatient Service Utilization Among Veterans Assessed by the HCMI Veterans Program: An Analysis of Data from the VA Outpatient File

One of the goals of the HCMI Veterans program is to increase the access of homeless chronically mentally ill veterans to VA health care services. To determine whether and to what extent participation in the HCMI Veterans program is associated with increased use of VA health care services, an analysis of the use of various VA outpatient services during the six months before and after the date of first contact with the program was conducted, using data from the VA national computerized outpatient file.

Methods

Social security numbers of 10,524 homeless veterans assessed during the first year of the program (May 1, 1987 - March 31, 1988) were merged with VA's system-wide computerized outpatient workload file, the Outpatient File. Using either the date of the Intake Form for Homeless Veterans (IFHV) or the first HCMI program stop code entry (whichever came first) as a reference point, VA health service use before and after contact with the HCMI Veterans program was assessed. Stop codes were clustered into multiple categories of mental health and non-mental health service (Table B-4-1). For the 6 months before and after the intake date four workload measures were calculated:

1) the percentage of veterans who received each type of health service;

2) the average number of visits per veteran who used each type of health care service;

3) the average number of days on which veterans who used each type of health care service received that service; and finally,

4) the total number of visits of each health care service type provided to the entire HCMI Veterans program population during each six month period.

Finally, the change ratio from the first six months to the second was calculated (final four columns of Table B-4-1).

Results

A substantial percentage of veterans (62%) had used VA services during the 6 months before entering the HCMI program although only 32% had access to specialized mental health services. Increases in the percentage of veterans using services and in the numbers of services received per veterans were

greatest for mental health services (Table B-4-1). During the six months after initial contact with the program 98% received some VA health services and 57% received specialized mental health services. Thus almost twice as many veterans received mental health services six months after program entry as before (change ratio = 1.8).

The greatest increases in service delivery are observed for the total number of visits, which increased 2.4 times from the six months before program entry to the six months after program entry. Here too the greatest increases were in the number of specialized mental health visits provided, which increased 2.6 times from 20,996 visits during the six months prior to the program to 53,606 visits during the six months after first contact with the program.

Conclusion

These data show that although many veterans contacted by the HCMI program had received some VA health care services during the six months prior to their first contact with the program, both the number of veterans receiving services and the quantity of services they received increased substantially after, and we presume, largely as a result of, involvement in the HCMI veterans program. The program appears to have successfully met this objective.

TABLE B-4-1. VA OUTPATIENT SERVICE USE BY HCMI VETERANS 6 MONTH BEFORE AND AFTER INTAKE, FROM NATIONAL VA OUTPATIENT FILE (N-8,924)*.

	BEFORE INTAKE				AFTER INTAKE				CHANGE RATIO BEFORE to AFTER			
	% OF VETS	AVERAGE VISITS/VET	AVERAGE DAYS/VET	TOTAL VISITS	% OF VETS	AVERAGE VISITS/VET	AVERAGE DAYS/VET	TOTAL VISITS	% OF VETS	AVERAGE VISITS/VET	AVERAGE DAYS/VET	TOTAL VISITS
ANY VA OUTPATIENT CONTACT	62%	13.2	12.0	72,367	98%	20.2	18.5	175,748	1.6	1.5	1.5	2.4
ANY MENTAL HEALTH	32%	7.7	6.9	20,996	57%	10.5	9.8	53,606	1.8	1.5	1.4	2.6
MENTAL HEALTH CLINIC: NON SUBSTANCE ABUSE	27%	5.2	4.9	12,536	51%	7.2	6.7	33,015	1.9	1.4	1.4	2.6
HCMI PROGRAM	0%	0.0	0.0	0	76%#	4.4	4.4	29,635				
MENTAL HEALTH CLINIC: INDIVIDUAL	26%	4.7	3.9	9,795	49%	5.4	5.1	23,876	1.9	1.3	1.3	2.4
MENTAL HEALTH CLINIC: GROUP	3%	4.8	4.8	1,256	9%	5.6	5.1	4,598	3.2	1.2	1.1	3.7
DAY HOSPITAL/TREATMENT	1%	17.7	17.3	1,484	3%	17.0	15.6	4,551	3.2	1.0	0.9	3.1
MENTAL HEALTH CLINIC: SUBSTANCE ABUSE	13%	7.3	7.1	8,444	22%	10.2	9.5	20,216	1.7	1.4	1.3	2.4
ANY NON-MENTAL HEALTH	60%	9.6	8.6	51,381	84%	12.4	11.0	92,491	1.4	1.3	1.3	1.8
ADMISSIONS	55%	3.1	3.1	15,055	69%	3.2	3.2	19,577	1.3	1.0	1.0	1.3
MEDICAL-SURGICAL CLINIC	39%	3.6	3.2	12,436	56%	4.3	3.8	21,641	1.5	1.2	1.2	1.7
OTHER PROFESSIONAL VISIT	35%	5.7	4.8	17,690	62%	7.6	6.6	42,278	1.8	1.4	1.4	2.4
LABORATORY VISIT	16%	2.4	1.9	3,339	11%	2.0	1.5	1,891	0.7	0.8	0.8	0.6
OTHER NON-MENTAL HEALTH	13%	2.3	2.0	2,770	31%	2.6	2.1	7,088	2.3	1.1	1.0	2.6

* 85% of 10,524 veterans had an outpatient file entry that matched their social security number. Intake date is either date of IFHV or first HCMI stop code entry.

Percentage is less than 100% becasue of incomplete use of HCMI stop code during program start-up phase.

Appendix C:

Descriptive Materials from the Dallas VA Comprehensive Homeless Service Center

CHC Organization/Mission
STEPHEN BERMAN, MSW-ACSW
May 9, 1991

DEPARTMENT OF VETERANS AFFAIRS
COMPREHENSIVE HOMELESS CENTER
Dallas, TX

Statement of Organization and Mission

The Organization of the VA Comprehensive Homeless Center

The Department of Veterans Affairs first Comprehensive Homeless Center (CHC) is a consortium of VA programs serving homeless veterans in the primary service area of the VA Medical Center in Dallas, Texas. This consortium provides and coordinates a wide array of treatment and rehabilitation activities for mentally and physically ill homeless veterans.

The VA programs collaborating to form the Comprehensive Homeless Center are, the Veterans Health Services and Research Administration (VHS&RA) and the Veterans Benefits Administration (VBA). The CHC is located at the VA Medical Center in Dallas, Texas. Stephen Berman, M.S.W., Chief, Social Work Service, VAMC, Dallas, is the Program Director of the CHC. Robert Fowler, M.D., Chief, Psychiatry Service, VAMC, Dallas, is the Medical Director. VACO oversight is provided by the Special Subcommittee Working Group on the Homeless, chaired by Paul Errera, M.D., Director, Mental Health and Behavioral Sciences Services.

The Mission of the Comprehensive Homeless Center

The mission of the CHC is to help mentally and physically ill homeless veterans abandon life on the streets and rejoin society as productive citizens. To accomplish this mission, the CHC brings together a wide array of VA and community resources to develop a comprehensive, coordinated range of services. By developing this integration of services, the CHC creates new opportunities for the homeless veteran to access needed treatments, to get and hold a job and to learn how to maintain permanent housing. In order to implement this mission, the CHC has the following five Goals:

1. To develop and implement innovative approaches to high quality treatment and rehabilitation for mentally and physically ill homeless veterans.

2. To forge partnerships between programs in the Department of Veterans Affairs in order to provide integration of VA Homeless services.

3. To provide leadership and technical support in the development of state, county and city services for the homeless veteran.

4. To foster public and private cooperation by collaborating with community agencies, volunteers and private sector businesses in creating rehabilitation resources for homeless veterans.

5. To serve as a national VA demonstration and evaluation program in integration of services for the homeless veteran.

Treatment and Rehabilitation Programs in the CHC include:

1. A Homeless Chronically Mentally Ill Program for outreach to homeless shelters.

2. A 40 bed Homeless Domiciliary for inpatient rehabilitation.

3. A Compensated Work Therapy/Therapeutic Residence Program for work and housing.

4. A Community Residential Care Program for supervised living.

5. The Readjustment Counseling Service providing services to homeless Vietnam veterans in Vet Centers.

6. Veterans Benefits Administration provision of benefits counseling to homeless veterans.

Management of the Comprehensive Homeless Center (CHC)

The CHC has an oversight committee called the Comprehensive Homeless Center Steering Committee. The Steering Committee meets bi-monthly and is responsible for implementation of the mission and the five goals of the CHC. Its membership is as follows:

Stephen Berman, M.S.W., Chairman, Chief, Social Work Service, Program Director, CHC, VAMC, Dallas.
Robert Fowler, M.D., Co-chairman, Chief, Psychiatry Service, Medical Director, CHC, VAMC, Dallas.
Malcolm Burdick, Ph.D, Acting Chief, Domiciliary Care For Homeless Veterans Program, VAMC, Dallas.
Dale Cannon, Ph.D, Chief, Psychology Service, VAMC, Dallas.
John Barilich, M.S.W., Assistant Chief, Social Work Service and Program Director, Homeless Chronically Mentally Ill Program, VAMC, Dallas.
Stephen Pierce, Veterans Services Officer, Waco, TX.
Edith Scaff, Associate Regional Manager/Counseling, Readjustment Counseling Service, VAMC, Dallas.

Johnnie Rainbolt, Veterans Benefits Counselor, Fort Worth, TX.
Matt Menger, Ph.D., Team Leader, Vietnam Veterans Center, Dallas, TX.

The CHC Steering Committee has a special subcommittee called The Comprehensive Homeless Center Clinical Council. The Clinical Council meets monthly and is responsible for the quality of care provided by the CHC clinical programs. This Council monitors treatment of Homeless veterans in VA Programs and coordinates services with community agencies for homeless veterans. The Membership of the Clinical Council is:

Stephen Berman, M.S.W., Chairman, Chief, Social Work Service, Program Director, CHC, VAMC, Dallas.
Robert Fowler, M.D., Co-chairman, Chief, Psychiatry Service, Medical Director, CHC, VAMC, Dallas.
Malcolm Burdick, Ph.D, Acting Chief, Domiciliary Care For Homeless Veterans Program, VAMC, Dallas.
Dale Cannon, Ph.D, Chief, Psychology Service, VAMC, Dallas.
John Barilich, M.S.W., Assistant Chief, Social Work Service and Program Director, Homeless Chronically Mentally Ill Program, VAMC, Dallas.
George Trapp, M.D., Chief, Mental Hygiene Clinic, VAMC, Dallas.
Ted Keitch, M.S.W., Program Director Compensated Work Therapy VAMC, Dallas.
Gloria Johnson, M.S.W., Program Director, Community Residential Care Program, VAMC, Dallas
Nancy McCullar, RN, Assistant Chief, Nursing Service/Psychiatry Ambulatory Care, VAMC, Dallas

THE DEVELOPMENT OF THE DEPARTMENT OF VETERANS AFFAIRS FIRST COMPREHENSIVE HOMELESS CENTER LOCATED AT THE VETERANS AFFAIRS MEDICAL CENTER IN DALLAS, TEXAS

BACKGROUND

In May 1989, although there were between 3,000-4,000 homeless veterans in Dallas there were no VA health care programs specifically designed to serve this population. By May 1991, The Dallas Veterans Affairs Medical Center (VAMC) was well on its way to addressing many of the unmet needs of homeless veterans. A Comprehensive Homeless Center (CHC) was organized in which a number of homeless programs were developed and activated from grants funded in Washington, DC. The programs form a continuum of care for homeless veterans. This continuum of care provides a wide range of comprehensive services in close proximity to each other so that all services are accessible to the homeless veteran as his or her needs change.

Development of the Programs of the Comprehensive Homeless Center

The specific programs developed during this two year period follow in the order in which they were activated and started treatment. Compensated Work Therapy, (July, 1989), Community Residential Care, (November, 1989), Domiciliary Care for Homeless Veterans, (February, 1990), Homeless Chronically Mentally Ill, (May, 1990), Therapeutic Residence, (May, 1990). In addition, in January 1991, the Veterans Benefits Administration, in collaboration with Mental Health and Behavioral Sciences, provided a Veterans Benefits Counselor to work half time in the Comprehensive Homeless Center Programs to help homeless veterans access compensation, pension and training programs.

Domiciliary Care for Homeless Veterans (DCHV)

In the Spring of 1989, after demonstrating the need for an inpatient rehabilitation facility for homeless veterans, VAMC Dallas was approved for a 40 bed homeless domiciliary by Veterans Affairs Central Office (VACO) Extended Care Service. Since the Dom began receiving patients in December 1989, its average ADC has been 36 patients. The Dom has provided psychosocial rehabilitation which can last five to seven months depending on the individual needs of the veteran. The Dom works closely with the Compensated Work Therapy Program, and many of the patients in the Dom work in CWT.

Compensated Work Therapy (CWT)

The Compensated Work Therapy Program at VAMC Dallas was started out of local VAMC resources in the winter of 1989. Two social workers who were pulled from other assignments developed a small number of contracts with private industries, and the program was started in very limited space in the Day Treatment Center. By October 1990, a new 3000 square foot building was completed allowing the program to provide more work opportunities for homeless veterans. By May 1991, the program has doubled the income generated from contracts compared to 1990. The current contracts include assembling, heat shrinking and packing gift boxes, gluing and assembling mailing tubes, recycling plastic food bags, constructing ice cream cups and serving as contract labor for ground maintenance, vending and machine operating. The CWT Program currently has 25 veterans working each day.

Community Residential Care (CRCP)

The VAMC Dallas funded Community Residential Care Program was organized to provide residential care, including room, board and limited personal care and supervision (often including supervision of medications) to homeless chronically mentally ill veterans who do not require hospital or nursing home care but who, because of medical or psychosocial health conditions, are not able to live independently. The VA Comprehensive Homeless Center does not provide the payment for community residential care for homeless veterans. However, as some of the homeless veterans received VA pension or compensation or other income, they were placed in the Community Residential Care Program. Because of the program's success in working with the operators of the community residential care homes, and the programs access to a wide range of placement resources, several homeless veterans have been placed in CRC homes pending receipt of benefits. This has been a great help to the homeless in getting off the streets as soon as possible. The current average daily census of the program is 51 patients. Of this total, 17 were homeless veterans.

Homeless Chronically Mentally Ill (HCMI)

In May 1990, VAMC Dallas received funds for the Homeless Chronically Mentally Ill Program. With these resources VAMC Dallas was able to offer outreach, case management and contract treatment in community based residential treatment facilities to homeless veterans. Veterans are now placed in two residential treatment facilities in Dallas from the streets, shelters, the Homeless Domiciliary and from the acute inpatient services. The VBA Counselor is an integral part of the HCMI team and visits all of the shelters with the clinical staff. As of May 1991, the program's 22 contract beds were full and staff in the program were providing outreach and placement services to homeless veterans in shelters, day centers and soup kitchens in Dallas.

Therapeutic Residence (TR)

In December 1990, funds were received from Mental Health and Behavioral Sciences in VACO for a Therapeutic Residence Program. This program has been conceptualized as the phase of the rehabilitation process in which the veterans who have received treatment and rehabilitation and learned how to seek and hold a job in the CWT Program move on to live in a supportive peer group in a house purchased by the VAMC and rented to the veterans. On May 9, 1991, the first house was purchased and activated. It should be noted that the Compensated Work Therapy and the Therapeutic Residence have been combined into one program now called the CWT/TR Program.

Comprehensive Homeless Center Joint Ventures with Community Agencies in Dallas

From its beginning, Comprehensive Homeless Center staff have been working to pool VA and community resources in order to provide the maximum help to veterans in addressing the problems of homelessness, mental illness and substance abuse. VA staff have been outplaced in the Dallas Life Foundation, Trinity Ministries, the Day Resource Center and the Stewpot in Dallas. In addition, VA is now paying for the care of veterans in The Salvation Army and Turtle Creek Treatment Program. The largest joint venture is the current collaboration between the VA and the City of Dallas.

1. Joint Venture with the City of Dallas Day Resource Center and the Comprehensive Homeless Center:

After VA staff had identified that there were many substance abuse and mentally ill veterans showing up at the Day Resource Center each day, the decision was made in collaboration with Dallas city officials to start a joint program to provide compensated work therapy and substance abuse treatment to veterans using the Day Resource Center. In this joint venture, the City will provide to the VA free of charge the 2nd floor of the Day Resource Center, 14,000 net square feet, while the VA will provide the staff and equipment to run a work and substance abuse treatment program. The concept underlying the program is to use work as an incentive in engaging a treatment resistant population into treatment. The traditional substance abuse program gets people first into treatment and then months or years later into work. What this program proposes to do first is to get these veterans into work. As patients who are working exhibit substance abuse problems, VA staff will get them into treatment having already established relationships with them in the work place. The idea came up after VA staff observed

that the clients of the Day Resource Center stand in lines waiting to work in day labor pools but they do not stand in line waiting for treatment. This new program is due to be activated in Fall 1991, after the space is renovated by the City of Dallas.

2. Joint Venture with Downtown Dallas Family Shelter:

The Downtown Dallas Family Shelter is the only shelter in Dallas specifically for homeless families. It has a Department of Labor funded training program in which homeless persons can be trained to do building and repair maintenance. In a joint venture, the Downtown Family Shelter is providing this training program to veterans treated in the Comprehensive Homeless Center. About ten veterans placed by VA staff have graduated from this training program during this past year have have obtained employment.

The clinical goal of the Comprehensive Homeless Center has been to develop and implement innovative approaches to high quality treatment and rehabilitation for mentally and physically ill homeless veterans.

During the past year the CHC has helped homeless veterans in Dallas:

a. access acute treatment and rehabilitation services
b. learn how to obtain and hold a job
c. succeed in sustaining stable housing
d. develop a support system in the community
e. access community services as well as services offered by the VA

About 800-1,000 homeless veterans have received services in Dallas this year. Prior to this VA program these services were unavailable.